IOS/CA 2252

INSTRUCTION MANUAL
MODEL 486

MP MASTER
MA23605

Magnetic AB
Manufacturing Division

STOCKHOLM — BROMMA — SWEDEN

INSTRUCTION MANUAL

FOR

MTI TEST GENERATOR

MODEL 486

for serial nos. 544 and above

MAGNETIC AB
Stockholm - Sweden

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SPECIFICATION FOR MTI TEST GENERATOR MODEL 486

INTERMEDIATE FREQUENCY GENERATOR

INPUT SIGNALS (Two inputs TX1 and TX2)

Triggers

Voltage	5-20 V, pos.
Timing	t_o
Impedance	75 ohms
Pulse Length	2 us

Coho Lock Pulses

Voltage	280 mV, p-p
Timing	Magnetron Pulse
Impedance	75 ohms
Frequency	30 MHz $\pm$ 0.1 MHz

OUTPUT SIGNALS (Two outputs TX1 and TX2)
Combined output signal adjustable over 41 dB in 1 dB steps.

Coho Lock Pulses (For use when no lock pulse is available from radar)

Voltage	min 280 mV, p-p
Timing	t_o + (0.5-5) us (internal adjust.)
Impedance	75 ohms
Pulse Length	Same as fixed target, adjustable 0.9-5.2 us
Frequency	30 MHz*)

*) The actual frequency of the internally generased coho Lock pulse is 29.995 MHz. The moving target signal can be tuned from 29.997 to 30.007 MHz.
Tolerances of the crystals can make it possible to tune the moving target signal to the frequensy of the fixed target signal. When tuned to exactly the same frequency the moving target will appear as a fixed target.

IF CLUTTER SIGNALS

Voltage	Adjustable for not less than 80 mV peak to peak at the 14th pulse (delay 260 us). Bang pulse counted as first pulse.
Timing	A series of pulses spaced by 20 us starting at magnetron pulse. Amplitude diminishing exponentially (approx. 1 dB/pulse) with range. First pulse after t_o is the "bang" pulse and is not counted as a signal pulse.
Impedance	75 ohms
Pulse Length	0.9-5.2 us (internal adjustment)

IF MOVING TARGET SIGNALS

Voltage	max 280 mV, p-p. Amplitude adjustable over 41 dB in steps of 1 dB
Timing	t_o + (5-400 us), variable
Impedance	75 ohms
Pulse Length	0.9-5.2 us (internal adjustment)
Frequency	30 MHz, Δf = 10 kHz *)

VIDEO GENERATOR

TRIGGER INPUT

Voltage	5-20 V, pos.
Timing	t_o
Impedance	75 ohms
Pulse Length	2 us
Output Load Impedance	75 ohms

OPTIMUM VELOCITY PULSE

Pulse Length	2 us ± 0.5 us
Timing	t_o + 164 us ± 5 us
Output Amplitude	± 0.5 V, each alternate pulse of opposite polarity

CLUTTER PULSE

Pulse Length	2 us ± 10%, pos or neg
Timing	t_o + 164 us ± 5 us
Output Amplitude	0.5 V ± 0.05 V
Amplitude Stability	± 10 mV

INTERNAL TRIGGERING

Two internal PRF generators, one for the IF-generator and one for the video generator, are available for a "self check" procedure to ensure the correct operation without the necessity of external triggers.

PRF RANGE	250-1200 pps (internal adjustment)
POWER CONSUMPTION	115/220/230 V ± 10% 50-65 Hz, 40 VA, (max)
WEIGHT	15 kg
DIMENSIONS	482 x 222 x 400 mm (W x H x D) rack mount

PART 1

GENERAL DESCRIPTION

1.1 GENERAL INFORMATION

MTI Test Generator model 486 is a systems instrument intended for a specific purpose. For this reason the instruments are slightly different from each other and each model has been given a special model number, e.g. 486B-6.

The MTI Test Generator is used to check the MTI receiver circuits both in production test and on the radar site. The cancellation ratio and the sub-clutter visibility ratio can be measured.

The MTI Test Generator is fully transistorized and therefore a negligible amount of power is required from the power line. The instrument has been designed for military and civilian use.

1.2 PRINCIPLES OF OPERATION

The MTI Test Generator consists of two parts. One part which produces a coherent IF- and a non coherent signal to check the IF cancellation ratio, and sub-clutter visibility ratio, another part which generates video pulses for checking the canceller.

MTI IF Test Generator

This generator derives a clutter signal from the coho lock pulse. The lock pulse is "cleaned" by gating out only the middle part of the pulse. (Getting rid of the magnetron start and decay period).

The clean lock pulse is amplified and fed to a 10 us delay line, which will generate a burst of clutter signals. The separation between the clutter bursts is 20 us. During normal operation of the MTI system these pulses should not be visible on the radar indicator.

A unit which consists of an oscillator, a gate or modulator, a pulse generator, and an adjustable attenuator is included for sub-clutter visibility measurements. This unit generates a pulse, which is not coherent with the clutter pulse, and this pulse may be varied in time relative to the radar trigger. As this pulse is moved on top of one of the clutter signals one varies the output level of this pulse till the pulse is just detected in the presence of the clutter signal. The amplitudes of the clutter signals are known and it is then just a matter of reading the attenuation of the variable attenuator to compute the sub-clutter visibility figure.

MTI Video Test Generator

This generator is triggered by the system trigger and can generate two different types of pulses.

Optimum Velocity pulses are alternate positive and negative video pulses at the PRF of the radar. The pulse is delayed with respect to the transmitter pulse.

Clutter test pulses are negative or positive pulses, also delayed like the optimum velocity pulses, with a stable amplitude and very low jitter.

PART 2

OPERATION

2.1 INTRODUCTION

The MTI Generator may be permanently installed in the radar or used as a separate test instrument for maintenance or production control.

In a permanent installation the operator only has to operate the panel controls to select the required test signal. In a production test area the instrument will have to be connected to appropriate inputs and outputs in the MTI receiver.

A list of the panel controls and the input and output connectors explains most of the operation of the instrument.

2.2 CONTROLS AND CONNECTORS

Panel Controls:

OUTPUT SIGNAL ATTENUATION

This attenuator varies the combined output signal in steps of 1 dB up to 41 dB.

MOVING TARGET

POSITION

This control sets the position of the moving target pulse in relation to the external trigger (or the internal trigger if used).

LEVEL

This control is used to set the moving target signal to a suitable amplitude for sub-clutter visibility measurements. Normally the MOVING TARGET ATTENUATOR is set to 0 dB during this adjustment.

VELOCITY

This control varies the frequency of the moving target signal. It is used to set the frequency to simulate an optimum velocity signal (max response from the MTI receiver) for sub-clutter visibility measurements.

MOVING TARGET ATTENUATION

This attenuator varies the moving target signal amplitude in steps of 1 dB up to 41 dB. It is used to determine the sub-clutter visibility ratio.

FIXED TARGET

LEVEL

This control is used to set the fixed target signal (clutter or coherent signal) to a suitable amplitude. This control has a very small range and can be considered as a vernier when setting the MOVING TARGET LEVEL control.

COHO/TRIGGER

This switch selects the source of the inputs signals. Two positions are available, i.e. TX1 and TX2. It selects the Coho Lock Pulse and the system trigger.

This switch also switches the Output Signal to the appropriate receiver and, if used, the Coho Lock Pulse Output (See under COHO below).

COHO

This switch has two positions: viz INTernal and EXTernal. The EXT position is used for normal measurements and the INT position is used when no Coho Lock Pulse is available from the radar. When switched to INT a Coho Lock Pulse is available from the Test Generator for operating the MTI receiver.

MAINS

Connects power line to generator. Lamp indicates that instrument is switched on.

Panel Connector:

MONITOR OUTPUT

Gives a detected output of the combined signal.

Controls Behind the Panel (maintenance controls):

TRIGGER

This switch has two positions: viz.,INTernal and EXTernal. The switch is normally left in position EXT. For maintenance purposes it may be set in position INT. This connects all pulse generators to internal PRF generators.

All other controls are pre-set potentiometers, which are intended for maintenance or setting up adjustments. See PART 4, MAINTENANCE of this instruction manual for a list of these controls.

Connectors:

These connectors are mounted on the rear of the chassis and are as follows from left to right:

J1 32-pin (26-4401-32p) connector for power line and command signals

INPUTS (BNC, Impedance 75 ohms)

TRIGG 1, Trigger signal input from TX1
TRIGG 2, Trigger signal input from TX2
COHO 1, Coho Lock Pulse input from TX1
COHO 2, Coho Lock Pulse input from TX2
TR VIDEO, Trigger input for video generator

OUTPUTS (BNC, Impedance 75 ohms)

OUT VIDEO, Video Generator output
OUTPUT 1, Fixed and Moving Targets output for TX1 RX
OUTPUT 2, Fixed and Moving Targets output for TX2 RX
COHO 1, Coho Lock Pulse output for MTI receiver no 1
COHO 2, Coho Lock Pulse output for MTI receiver no 2

2.3 OPERATION

The operation simply consists of selecting the wanted signal by means of turning the panel controls and then studying the results on the radar indicator or maintenance oscilloscope. This operation may be part of the operation and maintenance of the radar and the operator is therefore referred to the radar instruction manual, where detailed instructions are given. The general procedure of operation is as follows:

IF Cancellation Ratio Measurements

a. Connect the Test Generator to the MTI receiver. Trigger Coho Lock Pulse and Output.

b. Disconnect the Lock Pulse to the Coho in the receiver and measure the amplitude of a fixed target at the output of the MTI receiver.

c. Connect the Lock Pulse to the Coho in the receiver and measure the residual of the target selected under b.

d. The ratio of the two amplitudes in b and c is the cancellation ratio.

IF Sub-clutter Visibility Measurements

a. Connect the Test Generator to the MTI receiver. Trigger, Coho Lock Pulse and Output.

b. Connect an oscilloscope to the MONITOR OUTPUT.

c. Set the MOVING TARGET ATTENUATOR to 0 dB.

d. Set the moving target near a suitable fixed target and adjust the amplitudes of the two to be equal by adjusting the controls MOVING TARGET LEVEL and FIXED TARGET LEVEL.

e. Adjust MOVING TARGET VELOCITY for maximum output from the MTI receiver.

f. Place the moving target on top of the fixed target and adjust MOVING TARGET ATTENUATION until the signal is just detectable at the output from the MTI receiver.

g. Read the attenuator setting, which gives the sub-clutter visibility ratio.

Video Generator Measurements

Connect the system trigger to TR VIDEO and the VIDEO OUT to the video input (before canceller) of the MTI receiver.

a. Switch to OPTimum VELocity and check the output from the canceller.

b. Switch to CLUTTER (POS) or (NEG) and measure the residual signal from the canceller.

c. The ratio of the two signals, (a) and (b), gives the cancellation ratio.

PART 3

THEORY OF OPERATION

3.1 INTRODUCTION

This section first gives an overall description of the theory of operation of the signal generator. Then each circuit of importance is described separately.

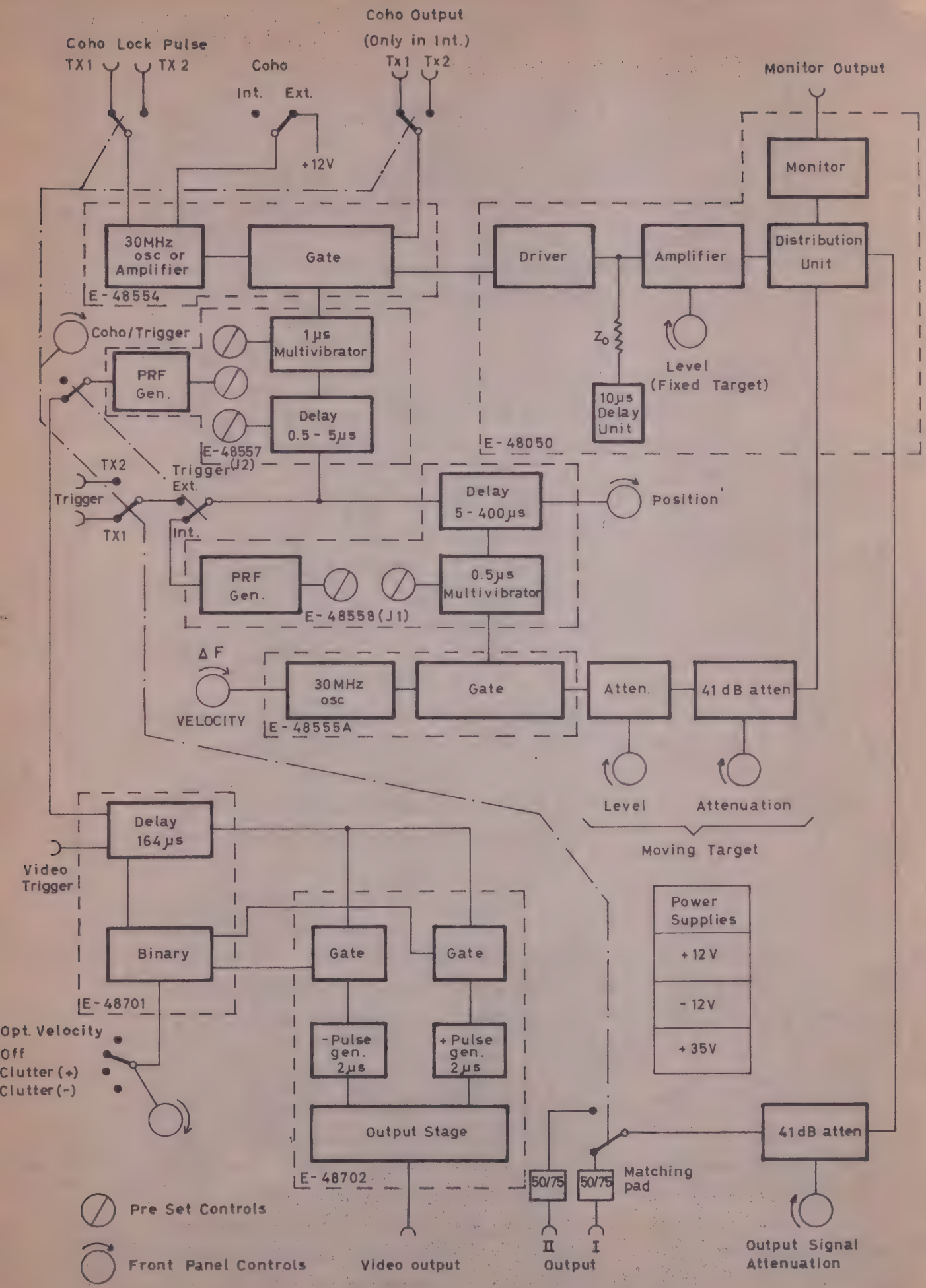
3.2 OVERALL DESCRIPTION

The MTI Test Generator is devided into the following parts:

1. Fixed Target Pulse and PRF generator
2. Moving Target Pulse and PRF generator
3. Fixed Target Gate and Oscillator/Amplifier
4. Moving Target Gate and Oscillator
5. (MTI) Amplifier and Monitor
6. Video Generator 1
7. Video Generator 2
8. 12 V Power Supply
9. 35 V Power Supply
10. Moving Target Attenuator
11. Output Attenuator

See fig. 3.1 for block diagram of MTI Test Generator.

The MTI Test Generator consists of two sections. One unit which generates IF signals and another unit which generates a video signal.



BLOCK DIAGRAM FOR MTI TEST GENERATOR MODEL 486

FIG 3-1

The IF generator starts with the coho lock pulse from the radar. This lock pulse is passed through a gate, which cuts out the first part and the last part of the lock pulse. These parts correspond to the starting and decay times of the magnetron. During these intervals the magnetron frequency is not constant and can therefore not be used as a clutter signal.

After amplification of the lock pulse it is fed to a 10 us delay line, which is open at its far end. This will cause reflections and the output signal will be a train of pulses decaying in amplitude. About the 15th pulse will be used for measurements as this will allow the coho to change its frequency to such a degree that it is easily detected. The decay is in the order of 1 dB per pulse or close to R^{-4}. These pulses are fed into the MTI receiver and should not be visible during normal operation.

Should a fault occur in the magnetron, the coho or the canceller these signals will show up as rings on the PPI, or residual signals on the maintenance oscilloscope. During adjustments of the radar these signals can be used to measure the cancellation ratio.

A variable 30 MHz oscillator, which is not coherent with the coho lock pulse, is pulse modulated. This pulse can be varied in time relative to the radar trigger. The amplitude of this pulse can be varied with a calibrated attenuator and used to measure the sub-clutter visibility ratio.

The video generator, which generates a signal to check the canceller, has two types of outputs: i.e. an optimum velocity signal consisting of pulses with alternate positive and negative amplitudes and a clutter signal with negative or positive signals. These signals are started by the radar system trigger and are delayed to occur at a suitable interval of the radar repetition period.

3.3 PULSE AND PRF GENERATORS

The MTI Test Generator has two generators of this type, one for the fixed target and one for the moving target.

Fixed Target Pulse and PRF Generator (J2)
This generator consists of two parts:

- the Pulse Generator with its Delay Multivibrator
- the PRF Generator

PULSE GENERATOR

The circuit diagram is shown on drawing E-48557. It consists of, in addition to the pulse generator for the gate, a delay multivibrator.

The trigger is fed via P1/S to the amplitude limiting zener Z2. Transistors V3-V6 together make the delay multivibrator, which has a variable delay determined by the value of the resistor R11 and potentiometer R25. The trailing edge of the positive pulse on the collector of V5 is used as a trigger after differentiation (C9-R15). After polarity reversal in V6 the pulse is used to trigger the multivibrator V7-V10, which has a fixed pulse length. This multivibrator's pulse length is set by the resistances R20-21 on the base of V10. The positive pulse is taken from the collector of V10 and is then fed via the emitter follower V11. From the V11 emitter the pulse is fed via P1/H to the gate or modulator, which is shown on drawing E-48554. The emitter follower V11 is a driver for the gate, which modulates the 30 MHz signal. The drive pulse is fed to J9/F on the 30 MHz GATE.

PRF GENERATOR

V1-V2 is a free running multivibrator and potentiometer R1 is used to vary its frequency. The transistors V1 and V2 are complimentary to each other and during the PRF time interval both are cut off. Condensers C1 and C2 are discharged through R1-R2. When voltage across C1 reaches the cut-off level of V1, this transistor starts to conduct and this in turn causes transistor V2 to conduct. A positive pulse, the duration of which depends on the charge time of C1 and C2, is generated across R6 and fed via P1/B to the TRIGGER selector. When C1 and C2 are charged to the cut off level of V1 this transistor is cut off and the two transistors are again cut off. This PRF generator is used to trigger the Video Generator of the Test Generator when switched to INT.

Moving Target Pulse and PRF Generator (J1)
This generator consists (like the fixed target generator) of two parts:

- the Pulse Generator with its Delay Multivibrator
- the PRF Generator

PULSE GENERATOR

The circuit diagram is shown on drawing E-48558. It consists of, in addition to the pulse generator for the gate, a delay multivibrator.

The trigger is fed via P1/S to the amplitude limiting zener Z2. Transistors V3-V6 together make the delay multivibrator, which has a variable determined by the value of the resistor R11 and a potentiometer via P1/N. The trailing edge of the positive pulse on the collector of V5 is used tas a trigger after differentiation (C9-R15)

After polarity reversal in V8 the pulse is used to trigger the multivibrator V7-V10, which has a fixed pulse length. This multivibrator's pulse length is set to 5 us by the resistances R20-21 on the base of V10. The positive pulse is taken from the collector of V10 and is then fed via the emitter follower V11. From the V11 emitter the pulse is fed via P1/H to the gate or modulator, which is shown on drawing E-48555. The emitter follower V11 is a driver for the gate, which modulates the 30 MHz signal. The drive pulse is fed to J10/F on the 30 MHz GATE.

PRF GENERATOR

V1-V2 is a free running multivibrator and potentiometer R1 is used to vary its frequency. The transistors V1 and V2 are complimentary to each other and during the PRF time interval both are cut off. Condensers C1 and C2 are discharged through R1-R2. When voltage across C1 reaches the cut-off level of V1, this transistor starts to conduct and this in turn causes transistor V2 to conduct. A positive pulse, the duration of which depends on the charge time of C1 and C2, is generated across R6 and fed via P1/B to the TRIGGER selector. When C1 and C2 are charged to the cut off level of V1 this transistor is cut off and the two transistors are again cut off. This PRF generator is used to trigger the IF section of the Test Generator, when it is switched to INT.

3.4 30 MHz GATE AND OSCILLATOR

FIXED TARGET

The circuit diagram is shown on drawing E-48554. The oscillator consists of transistor V1 with the quartz crystal Y1. This oscillator switched as a 30 MHz amplifier when relay Re 1 receives +12 V via J9/K.

The output signal is coupled via L1-L2 in the collector circuit of V1 to the input circuit L3-L4 of the gate and then on to the diode gate Z1-Z4. When the diodes are conducting, the gate is open and when they are cut off, it is closed. The current through the diodes is governed by transistor V2, which gets its drive pulse from the output stage of the pulse generator (E-48557). After this first part of the gate the residual or leakage signal has been reduced by 50 dB (the on-off ratio). The signal is fed to another gate stage Z5-Z8 with the current drive amplifier V3. This drive amplifier receives the same drive pulse as V6. After passage through the two gate sections, the residual signal between pulses is 100 dB below the output signal. The output signal is split into two channels and fed via J13 and J25 to the MTI Amplifier and COHO OUTPUT respectively.

MOVING TARGET

The circuit diagram is shown on drawing E-48555A. The oscillator consists of transistor V1 with the quartz crystal Y1. The frequency[x)] of the oscillator can be varied by varying the bias on the varicaps Z9 and Z10. The output signal is coupled via L1 in the collector circuit of V4 to the input of V5 to L3-L4 of the gate and then on to the diode gate Z1-Z4. When the diodes are conducting, the gate is open and when they are cut off, it is closed. The current through the diodes is governed by transistor V2, which gets its drive pulse from the output stage of the pulse generator (E-48558). After this first part of the gate the residual or leakage signal has been reduced by 50 dB (the on-off ratio). The signal is fed to another gate stage Z5-Z8 with the current drive amplifier V3. This drive amplifier receives the same drive pulse as V6. After passage through the two gate sections, the residual signal between pulses is 100 dB below the output signal. The output signal is fed via J26 to the MOVING TARGET LEVEL Control.

x) The oscillator oscillates at the X-tal fundamental (10 MHz) and the frequency is trippled in transistor V4. Transistor V5 is a 30 MHz amplifier.

3.5 MTI AMPLIFIER

The circuit diagram is shown on drawing E-48559. The output from the fixed target gate is fed to the input of the amplifier via J12. The input signal is fed via the emitter follower V1 via a grounded base stage V2, which feeds the driver V3. This driver is a class B amplifier, which drives the delay line, Y1. This delay line has a delay of 10 us and is open at its far end. This results in reflections at the end of the line and the input or drive pulse generates a series of pulses, separated 20 us. The first "reply" or signal pulse is about 30 dB below the amplitude of the drive pulse. There is a decay in amplitude from pulse to pulse of about 1 dB.

The drive pulse is limited by the diodes Z1 and Z2 in the emitter follower stage V4, which follows the delay line, before the signal is fed to the output stage, which consists of V5 and V6. Due to the rather high dissipation in transistor V6 it has a heat sink mounted. V5 is a grounded base stage, which provides drive power to the class A amplifier V6. The signal is then fed via R20 and connector J14 to the output attenuator.

This unit also contains the monitor circuits. The signal, which consists of both the fixed and the moving targets is picked off from connector J14 via condenser C28 to emitter follower V7, which drives the grounded base stage V8. The output from V8 is fed to the detector Z3, which detects the signal and after filtering in C34, C35, C36 and D2 the signal is fed to the panel connector. MONITOR OUTPUT via emitter follower V9.

3.6 ATTENUATORS AND LEVEL CONTROLS

The two step attenuators, OUTPUT SIGNAL ATTENUATION and MOVING TARGET ATTENUATION, are of the pi-type and have the following attenuator steps: 1, 2, 3, 5, 10 and 20 dB, which can be combined to a total attenuation of 41 dB in steps of 1 dB. The circuit diagram is shown on drawing E-211011. The resistors used are precision metal film resistors.

The MOVING TARGET LEVEL Control is of the potentiometer type and has a range of about 60 dB.

3.7 VIDEO GENERATOR

The circuit diagram is shown on drawing E-48701 and E-48716. The trigger signal is amplitude limited by Z6 and fed via V4 to the delay multivibtator V5-V6, which deliver trigger signals via V7 to the diode gates Z3 and Z11. When one of the diodes is conducting it passes on the trigger signal. Depending on the potential of the collectors of the bistable multivibrator, V2-V3, diode Z3 or Z11 or both will conduct. When the supply voltage is fed to V2 and V3 via P1/L and P1/M the two transistors operate as a bistable multivibrator. The trigger pulses are taken from the V4 collector via V1. In this case the output signal from the video generator are pulses of alternate polarity. (Optimum Velocity Target), i.e. Z3 and Z11 are cut off every second trigger period.

If supply voltage is fed to only one of P1/L or P1/M the bistable multivibrator no longer operates and one of the diodes Z3 or Z11 is cut off, and due to this only positive or negative pulses are generated by the video generator. Voltage on P1/P gives positive pulses and P1/M gives negative pulses out.

The trigger pulses from the diode gates feed the positive and the negative pulse generators (E-48716). The trigger pulses, are fed via P1/K and P1/R. The two pulse generators, positive and negative, have exactly the same circuit diagram. The trigger pulses are fed via the driver V1 (V5) to the monostable multivibrator V2-V3 (V6-V7), which generates pulses with the length of 2 us. This pulse is fed via emitter follower V4 (V8) to the output stage V9 (V10), which limits the output signal amplitude to +0.5 V. The pulse length is determined by C1 (C3) and resistors R4, R6, R7 and R8 (R15, R17, R18, R19). The length of the pulse is set during manufacture through selection of resistors. The supply voltage +12 V is constant ($\pm$ 0.2 V) and R24-R26 (R29-R31) are adjusted for an output pulse of 0.5 V when the generator is loaded by 75 ohms.

3.8 POWER SUPPLIES

The circuit diagrams are shown on drawings E-480102 (+12 V and -12 V) and E-11440 (+35 V).

Three supplies are used: +12 V, -12 V and +35 V.

The rectifiers and filter condensers are mounted on the chassis. It is therefore only the regulator which is mounted on the printed circuit board. The three regulators have exactly the same schematic diagram, so only the +12 V supply is described.

The comparator stage V6-V7 samples a portion of the output. Any deviation from correct voltage is passed on to the control amplifier V5, which feeds emitter follower V3. The emitter follower changes the base current of the series regulator V4 thus restoring the output to +12 V.

Should a short circuit occur across the output terminals, the voltage drop across R6 will switch off the regulator to prevent damage. An increase of the voltage drop causes the V1 collector current to decrease, which also decreases the current through V2. The decreasing voltage across the output from the supply makes V5 draw more current at the same time as V2 decreases its conduction. This makes the base current into V3 constant regardless of the drive on V5. The circuit functions as a constant current generator.

As long as the output voltage is large enough to keep the anode of Z2 positive relative to the cathode, the base current of V1 is not affected. When the output voltage reaches the value where Z2 cuts off, the base current into V1 starts to decrease causing the collector current to decrease. This makes the collector current of V2 decrease and thereby also decreasing the currents through V3 and V4. The result is that the entire regulator cuts off and the output voltage goes to zero where it stays until the power line is cut off and turned on again.

Condenser C1 gives a long enough time constant so that very short overloads do not make the regulator cut off. In addition it also keeps the voltage positive on the anode of Z2 during the switching on interval.

PART 4

MAINTENANCE

This instrument should require very little adjustment during operation. For the exception of the resistors in the attenuators no critical components have been used. Should a component failure occur, it should only be necessary to change the component and then check the output pulse for correct shape and level.

The mains transformer primary can be wired for the following nominal voltages: 115, 220 and 230 V. It is normally wired for 220 volt when delivered from the manufacturer. See drawing E-5691 for circuit diagram.

The following maintenance controls are available:

PULSE LENGTH (R20), Moving Target

Potentiometer on printed circuit card J-1 (E-48558). The pulse length can be set to any value between 0.9 and 5.2 us.

PULSE LENGTH (R20), Fixed Target

Potentiometer on printed circuit card J-2 (E-48557). The pulse length can be set to any value between 0.9 and 5.2 us, and should be adjusted so that the gate does not open for the trailing edge of the coho lock pulse.

DELAY (R25), Fixed Target

Potentiometer on printed circuit card J-2 (E-48557), which sets the delay between the input trigger and the "bang" pulse of the fixed target signals. Adjust for no transmission of the magnetron start (coho lock pulse) through the fixed target gate. Range of adjustment 0.5-5 us.

PRF (R1), IF Pulse Signals (Moving and Fixed Targets)
Potentiometer on printed circuit card J-1 (E-48558), which sets the repetition rate of the INTernal PRF generator; range of adjustment: 250-1200 pps (4000-834 us).

PRF (R1), Video Pulse Signals
Potentiometer on printed circuit card J-2 (E-48557), which sets the repetition rate of the INTernal PRF generator; range of adjustment: 250-1200 pps (4000-834 us).

SET +12 V (R19)
Potentiometer on printed circuit card D (E-480102) for setting the regulated +12 V.
Set to +12 ± 0.2 V at nominal line voltage.
Variation in voltage for ± 10% power line variation: ± 50 mV.
Ripple less than 20 mV ptp.

SET -12 V (R42)
Potentiometer on printed circuit card D (E-480102) for setting the regulated -12 V.
Set to -12 V ± 0.2 V at nominal line voltage.
Variation in voltage for ± 10% power line variation: ± 50 mV
Ripple less than 20 mV ptp.

Set +35 V (R19)
Potentiometer on printed circuit card (E-11440) for setting the regulated +35 V.
Set to +35 V ± 0.5 V at nominal line voltage.
Variation in voltage for ± 10% power line variation: ± 50 mV.
Ripple less than 20 mV ptp.

INDUCTORS L1-L9 (Fixed Target Gate and Osc/Ampl. E-48554)
INDUCTORS L1-L9 (Moving Target Gate and Osc. E-48555)
INDUCTORS L1-L8 (MTI Amplifier and Monitor, E-48550)

Adjust cores for maximum output signal and best shape of output pulse.

CAPACITORS C7 and C15 (MTI Amplifier and Monitor, E-48550)

Adjust for maximum output signal and best shape. The tuning of this condenser will effect the tuning of the indicator in the same stage.

PART 5

LIST OF ILLUSTRATIONS

MTI Test Generator model 486		
Wiring Diagram		E-48556
Power Supply +12/-12 V (D)		
Circuit Diagram		E-480102
Component Layout		E-480103
Component Layout, Rectifier		E-114126
Power Supply +35 V (C)		
Circuit Diagram		E-11440
Component Layout		E-11462
Component Layout, Recitifier		E-114128
Pulse and PRF Generator (J-2) Fixed Target		
Circuit Diagram		E-48557
Component Layout		E-48585
Pulse and PRF Generator (J-1) Moving Target		
Circuit Diagram		E-48558
Component Layout		E-48583
30 MHz Gate, Moving Target		
Circuit Diagram		E-48555A
Component Layout;	Board A1a	E-48576A
	Board B	E-480112-2
	Board C	E-480113
	Board D	E-48590
30 MHz Gate, Fixed Target		
Circuit Diagram		E-48554
Component Layout;	Board A2	E-48577
	Board B	E-480112-2
	Board C	E-480113
	Board D	E-48589

MTI Amplifier and Monitor	
Circuit Diagram	E-48550
Component Layout	E-48606 (1) and (2)
Component Layout, Monitor	E-48580
Video Generator (G and H)	
Circuit Diagram, Generator I (H)	E-48701
Circuit Diagram, Generator II (G)	E-48716
Component Layout, Generator I	E-48712
Component Layout, Generator I	E-48713
Component Layout, Generator II	E-48714
Attenuator 41 dB	
Circuit Diagram	E-211011
Primary of Mains Transformer	E-5691

E Koppl. änd. fr. S t. P 30.9.69 LT

J2	J3	J4	J5	J6	J7	P8	P9	P10
C	D	J-1	J-2	G	H			
				Videogen II	Videogen I	MTI ampl.	Gate (Fixed target)	Gate (Moving target)
E-11440	E-480102	E-48558	E-48557	E-48718	E-48701	E-48550	E-48554	E-48555

T1 10 11 1 8 2 3 9 4 5 6 7

Z11 Z12 Z13 Z14 C3 200µF

Z6 Z7 Z8 Z9 C2 1000µF

Z1 Z2 Z3 Z4 C1 1000µF

SL1 S1 F1

Z15 +35

Z5 Z10 +12

R1 Delay MOVING TARGET POSITION

S4

S5 EXT COHO INT +12

+12 R4 10 K -12

P26 P27 J27 R5 LEVEL MOVING TARGET J15 P15

0-40dB atten R6

P28 P25 P12 P13 P14 P11

J8 J9

OPT VELOC. OFF CLUTTER+ CLUTTER-

R2 FIXED TARGET LEVEL R3 1K

S2 TRIGGER Ext Int

Monitor output J40

0-40dB atten R7

COHO/TRIGGER S3 TX1 TX2 Re 1

J16 P16 J19 J20 50Ω

R8 R9 75Ω 5,7 dB min Loss Pads

P19 P20

J21 P21 P17 J17 J18 P18

P24 J24 P22 J22 J23 P23 Re2

J1 -16 -32 -15

J30 Trigger TX1

J31 Trigger TX2

J32 Output TX2

J33 Output TX1

J34 Coho lock pulse TX2

J35 Coho lock pulse TX1

J36 Video output

J37 Video trigger input

J38 Coho output TX1

J39 Coho output TX2

F 7.12.70 LT

D 2.5 69

A 20.2 69

Ändring och/eller modd.-nr | Datum | Inf. | Godk. | Nr | Ant. | Benämning | Material | Mod.-nr Norma Dimension | Anm.

MAGNETIC AB SWEDEN

MTI TEST GENERATOR MODEL 486

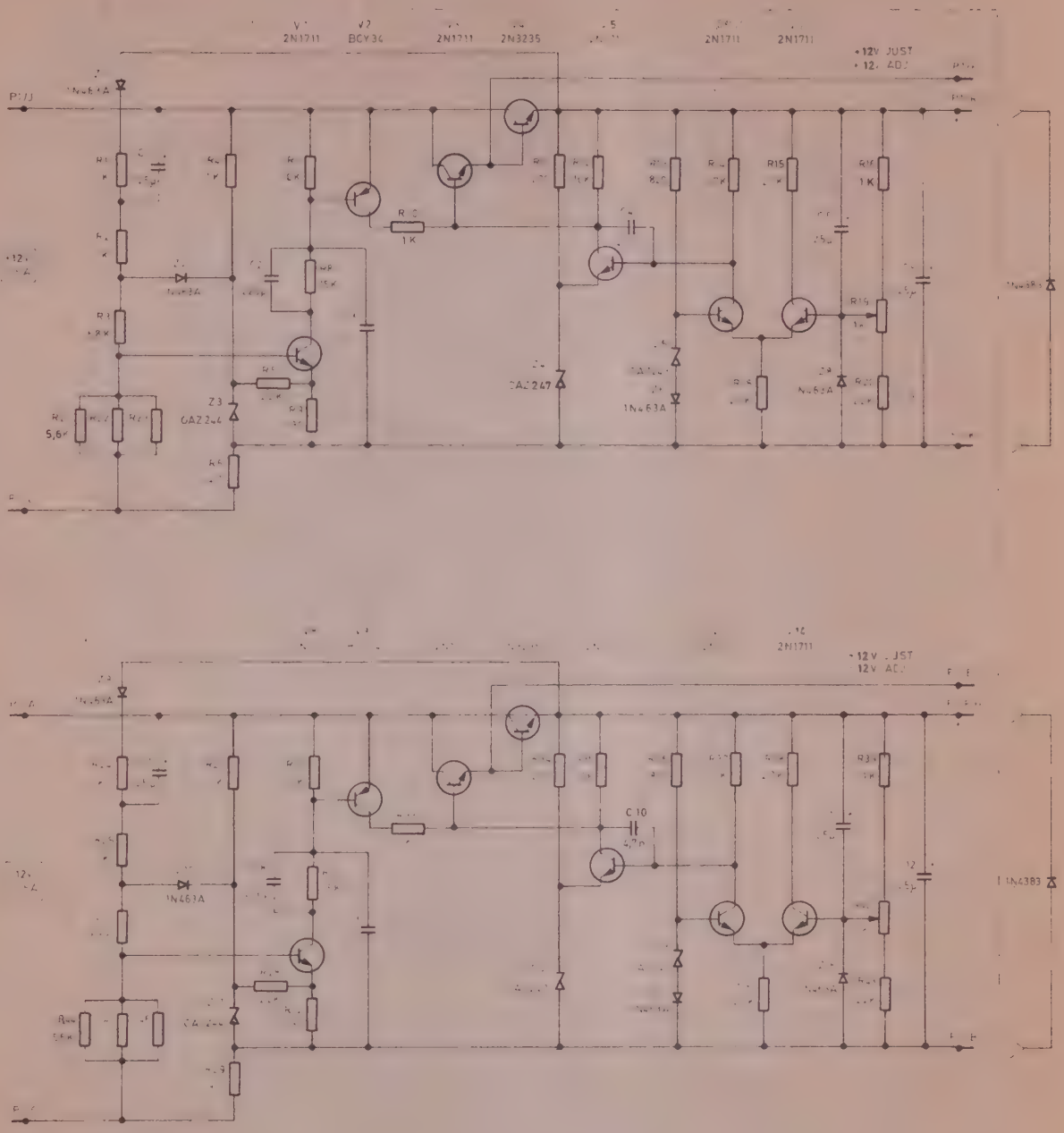
E-48556

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C1	Capacitor, elyt	1000 uF	35 V		Rifa	PEH 1331E/127
C2	Capacitor, elyt	1000 uF	35 V		Rifa	PEH 1331E/127
C3	Capacitor, elyt	200 uF	70 V		Rifa	PEH 1331E/238
Z1	Diode				T1	IN 4383
Z2	Diode				T1	IN 4383
Z3	Diode				T1	IN 4383
Z4	Diode				T1	IN 4383
Z5	Diode				T1	IN 4383
Z6	Diode				T1	IN 4383
Z7	Diode				T1	IN 4383
Z8	Diode				T1	IN 4383
Z9	Diode				T1	IN 4383
Z10	Diode				T1	IN 4383
Z11	Diode				T1	IN 4383
Z12	Diode				T1	IN 4383
Z13	Diode				T1	IN 4383
Z14	Diode				T1	IN 4383
Z15	Diode				T1	IN 4383
R1	Resistor, var	100 kohm	2 W		Spectrol	530
R2	Resistor, var	5 kohm	2 W		Ohmite	GU 5021

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R3	Resistor,	1 kohm	1/2 W		Vitrohm	SBT
R4	Resistor, var	10 kohm	1,5W		Relcon	HEL.05-B10
R5	Attenuator, var	60 ohm/ 65 dB	0.2 W		Preh (Elfa 1132)	E-48569
R6	Attenuator, step	50 ohm/ 41 dB			Magnetic AB	E-211011 (E-48560)
R7	Attenuator, step	50 ohm/ 41 dB			Magnetic AB	E-211011 (E-48560)
R8	Attenuator	75/50 ohm 5.7 dB			Texscan Corp.	ZM-57
R9	Attenuator	75/50ohm 5,7dB			Texscan Corp.	ZM-57
J1	Connector	32 pol			Amphenol	26-4401-32P
J2	Connector	15 pol			Amphenol	143-015-01
J3	Connector	15 pol			Amphenol	143-015-01
J4	Connector	15 pol			Amphenol	143-015-01
J5	Connector	15 pol			Amphenol	143-015-01
J6	Connector	15 pol			Amphenol	143-015-01
J7	Connector	15 pol			Amphenol	143-015-01
J8	Connector, coaxial	Push BNC				82-845
J9	Connector, coaxial	Push BNC				82-845
J10-J29	Connector, coaxial	BNC	Mounted directly on components			
J30	Connector, coaxial	BNC				UG-291A/U
J31	Connector, coaxial	BNC				UG-291A/U
J32	Connector, coaxial	BNC				UG-291A/U

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
J33	Connector, coaxial	BNC				UG-291A/U
J34	Connector, coaxial	BNC				UG-291A/U
J35	Connector, coaxial	BNC				UG-291A/U
J36	Connector, coaxial	BNC				UG-291A/U
J37	Connector, coaxial	BNC				UG-291A/U
J38	Connector, coaxial	BNC				UG-291A/U
J39	Connector, coaxial	BNC				UG-291A/U
J40	Connector, coaxial	BNC				UG-291A/U
P1-P7	Not assigned					
P8	Connector	9 pol			Amphenol	126-220
P9	Connector	9 pol			Amphenol	126-220
P10	Connector	9 pol			Amphenol	126-220
P11	Connector, coaxial	BNC				UG-88C/U
P12	Connector, coaxial	BNC				UG-88C/U
P13	Connector, coaxial	BNC				UG-88C/U
P14	Connector, coaxial	BNC				UG-88C/U
P15	Connector, coaxial	BNC				UG-88C/U
P16	Connector, coaxial	BNC				UG-88C/U
P17	Connector, coaxial	BNC				UG-88C/U
P18	Connector, coaxial	BNC				UG-88C/U
P19	Connector, coaxial	BNC				UG-88C/U
P20	Connector, coaxial	BNC				UG-88C/U
P21	Connector, coaxial	BNC				UG-88C/U

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
P22	Connector, coaxial	BNC				UG-88C/U
P23	Connector, coaxial	BNC				UG-88C/U
P24	Connector, coaxial					UG-88C/U
P25	Connector, coaxial					UG-88C/U
P26	Connector, coaxial					UG-88C/U
P27	Connector, coaxial					UG-88C/U
P28	Connector, coaxial					UG-88C/U
SL1	Lamp holder				Elit	52775, white lens
	Lamp, neon	Ba 9s	220 V		Elit	5297
T1	Transformer				Elab	18639
F1	Fuse holder				Wickman	19467
	Cap to same				Wickman	19167
	Fuse	0.5 A	slow blow		Wickman	19202
S1	Switch				NSF	8373 k8
S2	Switch				NSF	8373 k8
S3	Switch				NSF	8373 k8
S4	Selector	3 pole 4 way			Metal Products	MB-3 (Minibank)
Rel	Relay, coax		48 V DC		Amphenol	321-011064-4
Re2	Relay, coaxx		48 V DC		Amphenol	315-010002-4
	Knob	1 pc			Stockli	I 300-55-20
	Knob	1 pc				I 300-05-20
	Knob	1 pc				I 300-25-60
	Knob	2 pcs				I 300-25-20



	R.O.					KOMP. PLAC E-480103 HÅLRITN E-480104
MAGNETIC AB SWEDEN		480 LIKRIKTARE +12V o. -12V 0,5A Principschema		480 POWER SUPPLY +12V and -12V 0,5A Circuit diagram		25.11.1966
						E-480102

Pos. Nr Pos. No	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr. Part No
R1	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT
R2	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT
R3	Motstånd Resistor	6,8kohm	0,5 W	5 %	Vitrohm	SBT
R4	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT
R5	Motstånd Resistor	2,2kohm	0,5 W	5 %	Vitrohm	SBT
R6	Motstånd Resistor	4,7 ohm	5,5 W	5 %	Philips	83540
R7	Motstånd Resistor	10 kohm	0,5 W	5 %	Vitrohm	SBT
R8	Motstånd Resistor	15 kohm	0,5 W	5 %	Vitrohm	SBT
R9	Motstånd Resistor	330 ohm	0,5 W	5 %	Vitrohm	SBT
R10	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT
R11	Motstånd Resistor	270 ohm	0,5 W	5 %	Vitrohm	SBT
R12	Motstånd Resistor	10 kohm	0,5 W	5 %	Vitrohm	SBT

Pos. Nr Pos. No	Komponentbeskrivning Description	Värde Value	Effekt Nrl.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr. Part No
R13	Motstånd Resistor	820 ohm	0,5 W	5 %	Vitrohm	SBT
R14	Motstånd Resistor	2,7kohm	0,5 W	5 %	Vitrohm	SBT
R15	Motstånd Resistor	2,7kohm	0,5 W	5 %	Vitrohm	SBT
R16	Motstånd Resistor	1 kohm	0,25 W	1 %	Vitrohm	MEA-T1
R17	Motstånd Resistor					
R18	Motstånd Resistor	2,7kohm	0,5 W	5 %	Vitrohm	SBT
R19	Motstånd, var. Resistor, var.	1 kohm	1 W	5 %	Bourns	3010 P-1-102
R20	Motstånd Resistor	2,2kohm	0,25 W	1 %	Vitrohm	MEA - T1
R21	Motstånd Resistor	5,6 kohm	0,5 W	5 %	Vitrohm	SBT
R22	Motstånd Resistor	Adjusted at factory Utprovas	0,5 W	5 %	Vitrohm	SBT
R23	Motstånd Resistor		0,5 W	5 %	Vitrohm	SBT
R24	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT

Pos. nr	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	
R25	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT
R26	Motstånd Resistor	6,8kohm	0,5 W	5 %	Vitrohm	SBT
R27	Motstånd Resistor	1kohm	0,5 W	5 %	Vitrohm	SBT
R28	Motstånd Resistor	2,2kohm	0,5 W	5 %	Vitrohm	SBT
R29	Motstånd Resistor	4,7 ohm	5,5 W	5 %	Philips	83540
R30	Motstånd Resistor	10kohm	0,5 W	5 %	Vitrohm	SBT
R31	Motstånd Resistor	15kohm	0,5 W	5 %	Vitrohm	SBT
R32	Motstånd Resistor	330 ohm	0,5 W	5 %	Vitrohm	SBT
R33	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT
R34	Motstånd Resistor	270 ohm	0,5 W	5 %	Vitrohm	SBT
R35	Motstånd Resistor	10 kohm	0,5 W	5 %	Vitrohm	SBT
R36	Motstånd Resistor	820 ohm	0,5 W	5 %	Vitrohm	SBT

Pos. Nr Pos. No	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No
R37	Motstånd Resistor	2,7kohm	0,5 W	5 %	Vitrohm	SBT
R38	Motstånd Resistor	2,7kohm	0,5 W	5 %	Vitrohm	SBT
R39	Motstånd Resistor	1 kohm	0,25 W	1 %	Vitrohm	MEA-T1
R40	Motstånd Resistor					
R41	Motstånd Resistor	2,7kohm	0,5 W	5 %	Vitrohm	SBT
R42	Motstånd, var. Resistor, var.	1 kohm	1 W	5 %	Bourns	3010 P-1-102
R43	Motstånd Resistor	2,2kohm	0,25 W	1 %	Vitrohm	MEA-T1
R44	Motstånd Resistor	5,6 kohm	0,5 W	5 %	Vitrohm	SBT
R45	Motstånd Resistor	Adjusted at factory Utprovas	0,5 W	5 %	Vitrohm	SBT
R46	Motstånd Resistor		0,5 W	5 %	Vitrohm	SBT

Pos. Nr Pos. No	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr. Part No.
C1	Kondensator, elyt Capacitor, elyt	125 µF	25 V		Rifa	PEG 111F
C2	Kondensator, ker. Capacitor, cer.	220 pF	500 V		Erie	831
C3	Kondensator, MP Capacitor, MP	1000 pF	630 V	20%	Rifa	PME 2616/0.001
C4	Kondensator, MP Capacitor, MP	4700 pF	630 V	20%	Rifa	PME 2616/0.0047
C5	Kondensator, elyt Capacitor, elyt	25 µF	25 V		Rifa	PEG 111D
C6	Kondensator, elyt Capacitor, elyt	125 µF	25 V		Rifa	PEG 111F
C7	Kondensator, elyt Capacitor, elyt	125 µF	25 V		Rifa	PEG 111F
C8	Kondensator, ker. Capacitor, cer.	220 pF	500 V		Erie	831
C9	Kondensator, MP Capacitor, MP	1000 pF	630 V		Rifa	PME 2616/0.001
C10	Kondensator, MP Capacitor, MP	4700 pF	630 V		Rifa	PME 2616/0.0047
C11	Kondensator, elyt Capacitor, elyt	25 µF	25 V		Rifa	PEG 111D
C12	Kondensator, elyt Capacitor, elyt	125 µF	25 V		Rifa	PEG 111F

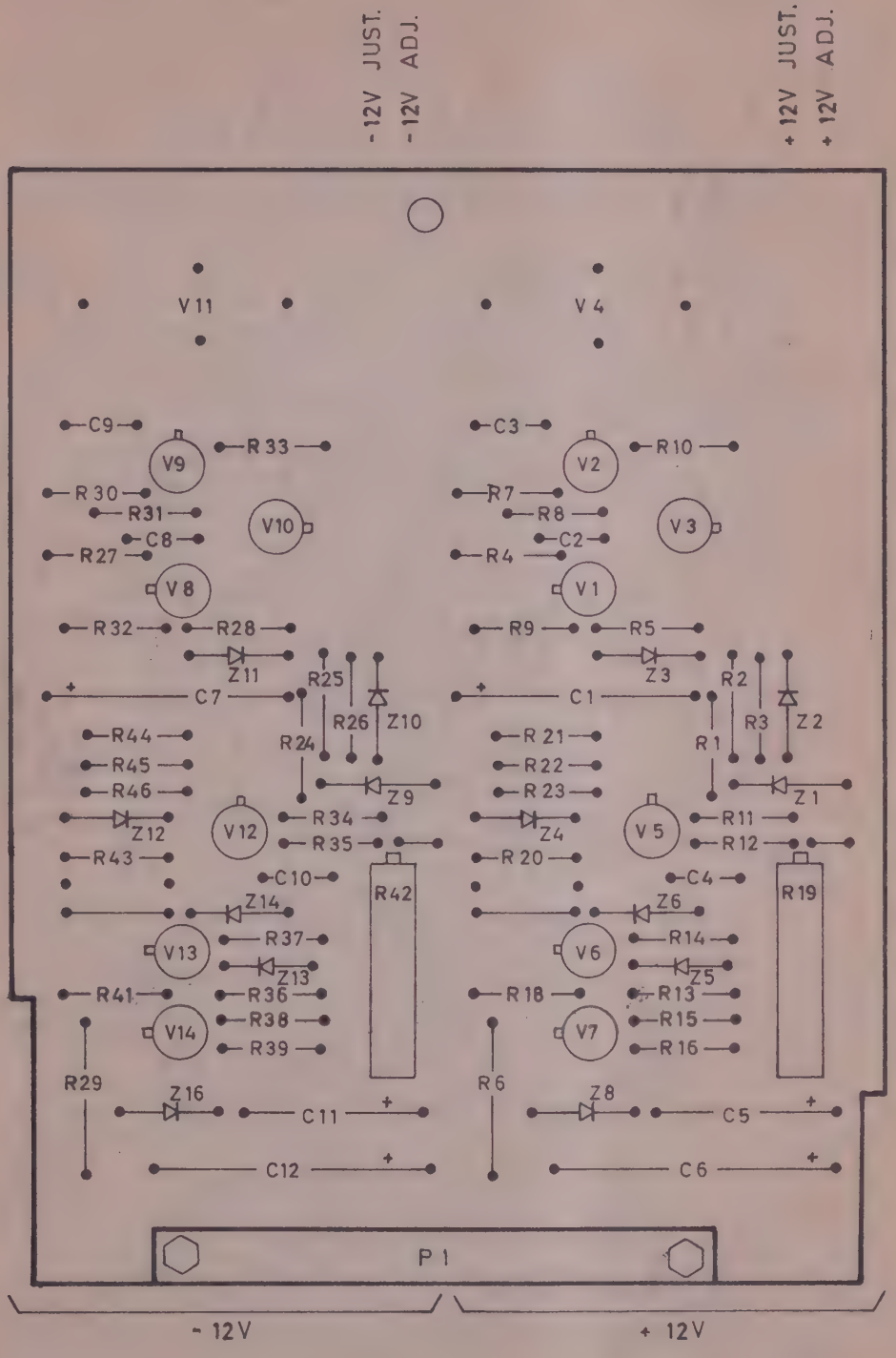
Pos. nr.	Komponentbeskrivning		Effekt Arb. p. Ka[illegible]	Tolerance	Tillverkare Manufacturer	Typ
V1	Transistor					2N 1711
V2	Transistor				Mullard	BCY 34
V3	Transistor					2N 1711
V4	Transistor					2N 3235
V5	Transistor					2N 1711
V6	Transistor					2N 1711
V7	Transistor					2N 1711
V8	Transistor					2N 1711
V9	Transistor				Mullard	BCY 34
V10	Transistor					2N 1711
V11	Transistor					2N 3235
V12	Transistor					2N 1711
V13	Transistor					2N 1711
V14	Transistor					2N 1711

Pos. nr Pos. No	Komponentbeskrivning Description	Värde Value	Tillverkare Manufacturer	Typ nr Part No
Z1	Diod Diode		Raytheon	1N 463A
Z2	Diod Diode		Raytheon	1N 463A
Z3	Diod, zener Diode, zener		Mullard	OAZ 244
Z4	Diod, zener Diode, zener		Mullard	OAZ 247
Z5	Diod, zener Diode, zener		Mullard	OAZ 243
Z6	Diod Diode		Raytheon	1N 463A
Z7	Diod Diode			
Z8	Diod Diode		Raytheon	1N 463A
Z9	Diod Diode		Raytheon	1N 463A
Z10	Diod Diode		Raytheon	1N 463A
Z11	Diod, zener Diode, zener		Mullard	OAZ 244
Z12	Diod, zener Diode, zener		Mullard	OAZ 247

Pos.Nr Pos.No	Komponentbeskrivning Description	Värde Value	Effekt Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ nr Part No
Z13	Diod, zener Diode, zener				Mullard	OAZ 243
Z14	Diod Diode				Raytheon	1N 463A
Z15	Diod Diode					
Z16	Diod Diode				Raytheon	1N 463A
P1	Kontakt Connector				Amphenol	133-015-03
	2 st Kylplåt				Magnetic AB	E-7232
	4 st Distans				Magnetic AB	E-211131

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.

V4 och V11 monteras med : Kylfläns E-7232
Distans E-211131



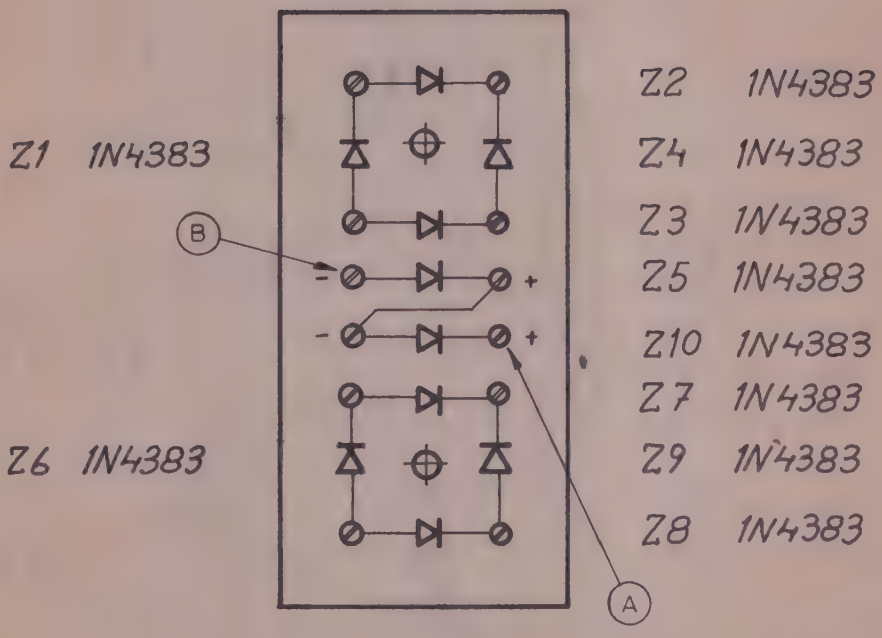
R6 och R29 monteras upphöjda från TL-kortet

Principschema E-480102

								Hålritning E-480104	
Det.-nr	Ant.	Benämning		Material				Anm.	
Konstr.	Ritad	Kop.	Konstr.	Stond.	Godk.	Skala		Ersätter	Ersatt av
MAGNETIC AB Stockholm Sweden			480 Likriktare E-480102 +12V och -12V 0,5 A Komponentplacering		480 Power Supply E-480102 +12V and -12V 0,5 A Component Layout			Blad	Da. 25.11.1966
								Ritn.-nr E-480103	

4118 Wilhelmsons Tr AB Stkhlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.

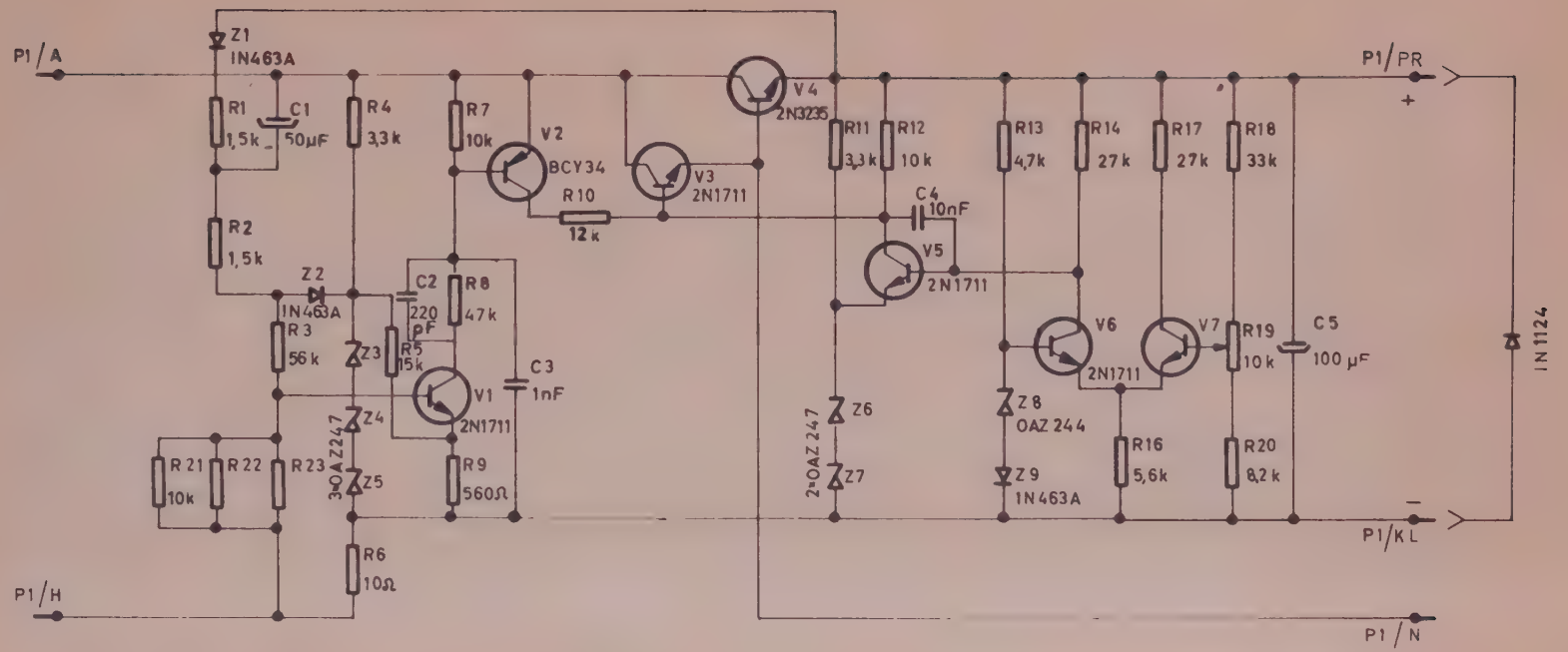


Märkningsritn. E-114125

Mättritning E-114109

	1							
Det.-nr	Ant.	Benämning		Material			Anm.	
Konstr.	Ritad	Kop.	Konstr.	Stand.	Godk.	Skala 1:1	Ersätter	Ersatt av
MAGNETIC AB Stockholm Sweden		Modell 114A3 Likriktarplint +10v & -13v Komponentplacering					Blad	Da. 30/11-65
							Ritn.-nr E-114126	

411* Wilhelmsons Tr AB Sthlm



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										Komp plac. ritn. E-11462	
Det. nr	Ant.	Benämning			Material					Anm.	
Konstr.	Ritad O.L	Kap.	Kontr.	Stand.	Godk.	Skala				Ersättar	Ersatt av
MAGNETIC AB Stockholm Sweden		LIKRIKTARE +35V 150 mA								Blad	Dat. nr 10.2-65
										Ritn. nr E-11440	

Electrical Part List

.	Komponentbeskrivning escription	Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Anm. Rem.
R1	Motstånd Resistor	1,5 k	0,5 W	5 %	Vitrohm	SBT
R2	Motstånd Resistor	1,5 k	0,5 W	5 %	Vitrohm	SBT
R3	Motstånd Resistor	56 k	0,5 W	5 %	Vitrohm	SBT
R4	Motstånd Resistor	3,3 k	0,5 W	5 %	Vitrohm	SBT
R5	Motstånd Resistor	15 k	0,5 W	5 %	Vitrohm	SBT
R6	Motstånd Resistor	10 ohm	1 W	5 %	Vitrohm	ABT
R7	Motstånd Resistor	10 k	0,5 W	5 %	Vitrohm	SBT
R8	Motstånd Resistor	47 k	0,5 W	5 %	Vitrohm	SBT
R9	Motstånd Resistor	560 ohm	0,5 W	5 %	Vitrohm	SBT
R10	Motstånd Resistor	12 k	0,5 W	5 %	Vitrohm	SBT
R11	Motstånd Resistor	3,3 k	0,5 W	5 %	Vitrohm	SBT
R12	Motstånd Resistor	10 k	0,5 W	5 %	Vitrohm	SBT
R13	Motstånd Resistor	4,7 k	0,5 W	5 %	Vitrohm	SBT

Pos. nr.	Description	Värde	Effekt	Tolerans	Tillverkare	Art. nr.
			Rating	Tolerance	Manufacturer	Part No.
R14	Motstånd Resistor	27 k	0,5 W	5 %	Vitrohm	SBT
R15						
R16	Motstånd Resistor	5,6 k	0,5 W	5 %	Vitrohm	SBT
R17	Motstånd Resistor	27 k	0,5 W	5 %	Vitrohm	SBT
R18	Motstånd Resistor	33 k	1/4 W	1 %	Vitrohm	MEA-T-1
R19	Motstånd, var. Resistor, var.	10 k			Bourns	3067 P-1-103
R20	Motstånd, Resistor,	8,2 k	1/4 W	1 %	Vitrohm	MEA-T-1
R21	Motstånd Resistor	10 k	1/4 W	5 %	Vitrohm	SBT
R22	Motstånd Resistor	Utprovas Selected	1/4 W	5 %	Vitrohm	SBT
R23	Motstånd Resistor	Utprovas Selected	1/4 W	5 %	Vitrohm	SBT

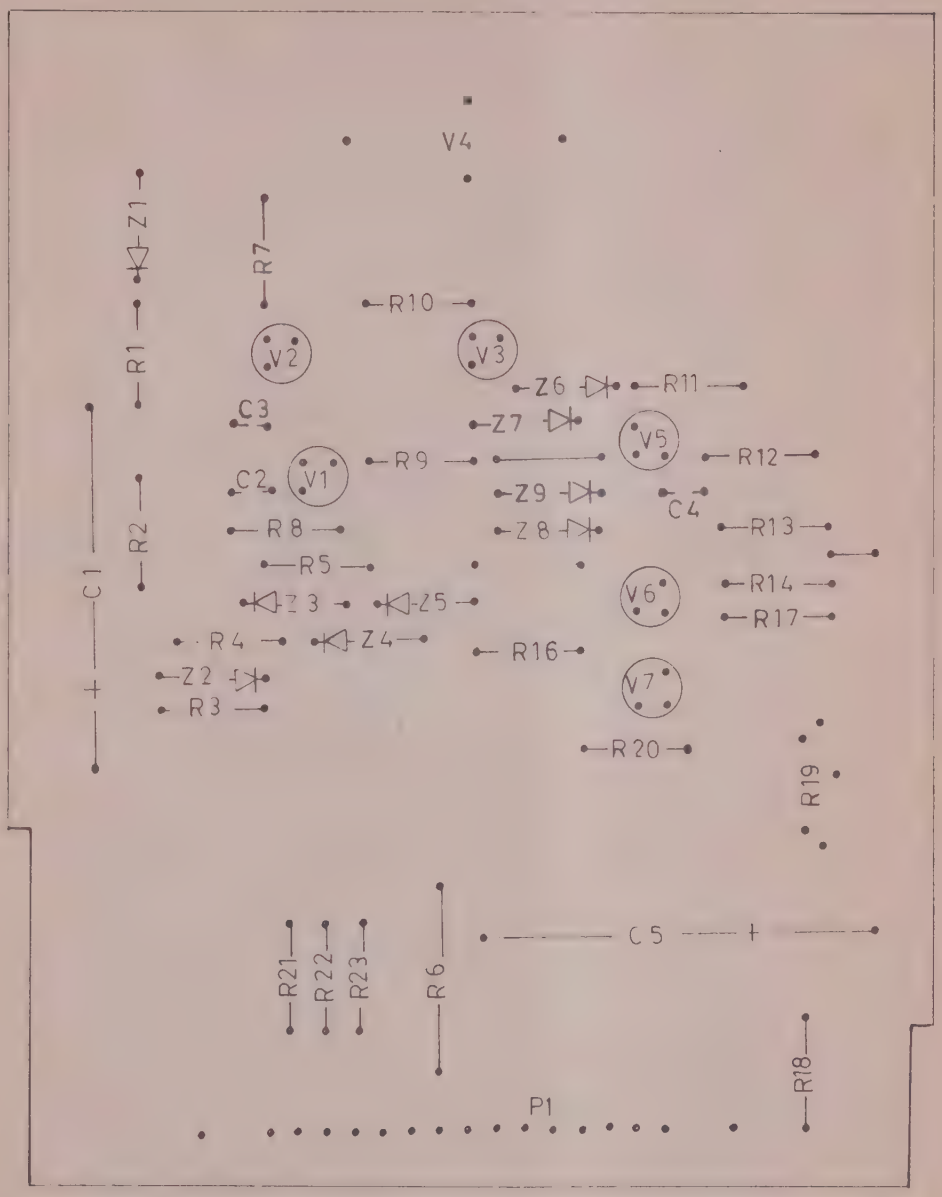
Electrical Part List

Pos. nr. Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ nr. Part No.
C1	Kondensator, elyt Capacitor, elyt	50 µF	100 V		Rifa	PEG 118D
C2	Kondensator, ker. Capacitor, cer.	220 pF	500 V	10 %	Erie	831
C3	Kondensator, ker. Capacitor, cer.	1 nF	575 V		Erie	831
C4	Kondensator, ker. Capacitor, cer.	10 nF	350 V		Erie	811
C5	Kondensator, elyt Capacitor, elyt	100 µF	64 V		Rifa	PEG 118D
V1	Transistor				Raytheon	2N 1711
V2	Transistor				Mullard	BCY 34
V3	Transistor				Raytheon	2N 1711
V4	Transistor				Silicon Transistor Corp.	2N 3235
V5	Transistor				Raytheon	2N 1711
V6	Transistor				Raytheon	2N 1711
V7	Transistor				Raytheon	2N 1711

					Tillverkare Manufacturer	
Z1	Diod				Raytheon	1N 463A
Z22	Diod				Raytheon	1N 463A
Z33	Diod, zener				Mullard	OAZ 247
Z4	Diod, zener				Mullard	OAZ 247
Z5	Diod, zener				Mullard	OAZ 247
Z6	Diod, zener				Mullard	OAZ 247
Z7	Diod, zener				Mullard	OAZ 247
Z8	Diod, zener				Mullard	OAZ 244
Z9	Diod				Raytheon	1N 463A
P1	Kontakt Connector				Amphenol	133-015-03
	1 st Kylplåt					E-211134
	1 st Kylplåt					E-211135
	2 st Distans					E-211131

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA FILER ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.

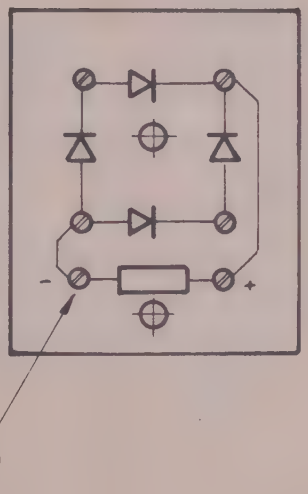
V4 monteras med: E-211131
E-211134
E-211135



								Måttritning E-11461	
Det.-nr	Ant.	Benämning		Material				Anm.	
Konstr.	Ritad O L	Kop.	Konstr.	Stand.	Godk.	Skala		Ersatter	Ersatt av
MAGNETIC AB Stockholm Sweden		LIKRIKTARE E-11440 KOMPONENTPLACERING						Blad	Da. 3.2-65
								Ritn.-nr E-11462	

4118 Wilkens-ins Tr. AB Sthlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



Z11 1N4383

Z12 1N4383

Z14 1N4383

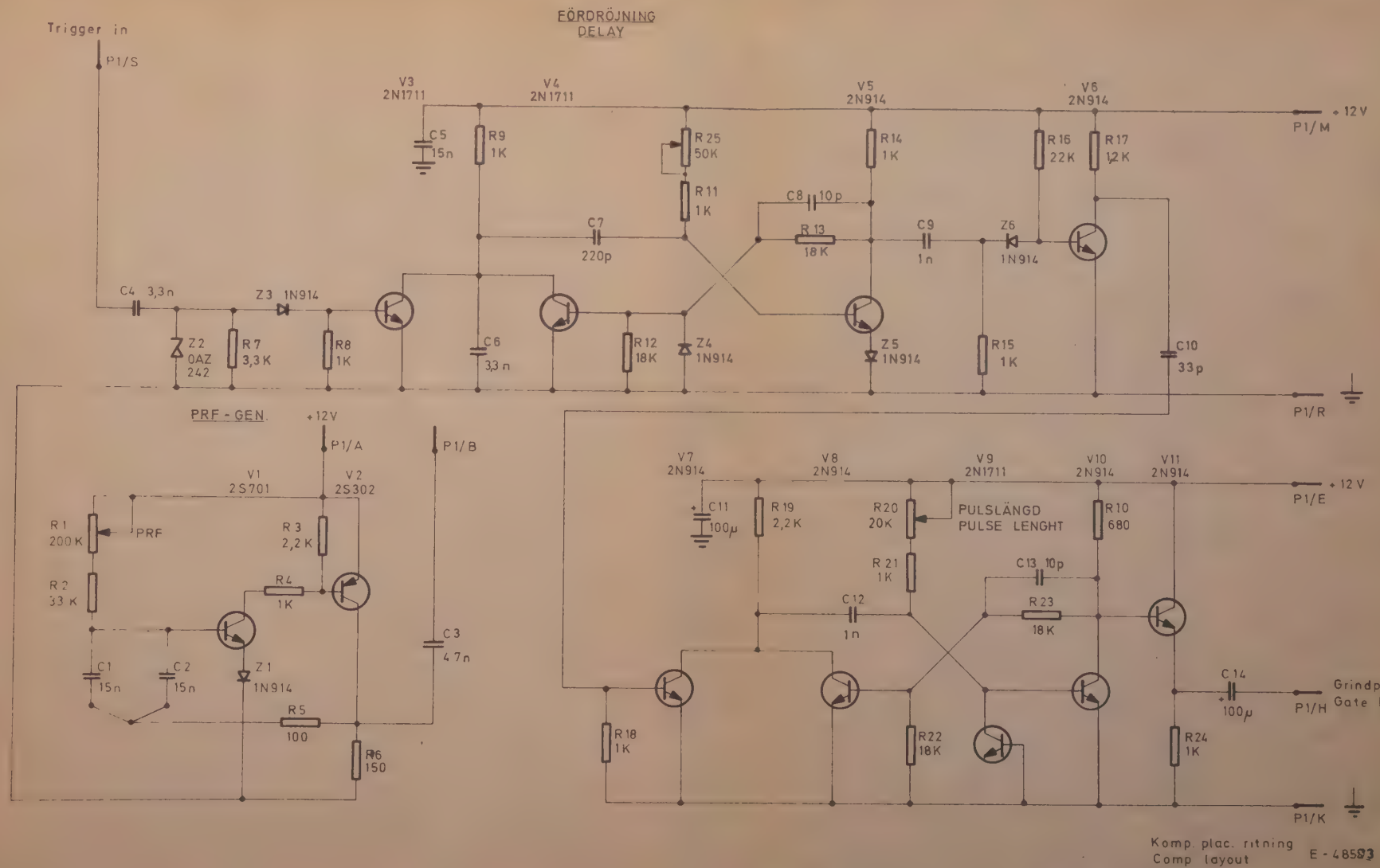
Z13 1N4383

R3

Mörkningsritn. E-114127

Mättritning E-114110

	1								
Det.-nr	Ant.	Benämning				Material		Anm.	
Konstr.	Ritad dfz	Kop.	Konstr.	Stand.	Godk.	Skala 1:1		Ersatter	Ersatt av
MAGNETIC AB Stockholm Sweden		Modell 114 Likriktarplint, Modulator Komponentplacering						Blad	Da. 30/11-65
								Ritn.-nr E-114128	



										Fixed Target	
Det. nr	Ant.	Benämning				Material				Anm.	
Konstr.	Ritad L. K.	Kop.	Konstr.	Stand.		Godk.	Skala		Ersatter	Ersatt av	
MAGNETIC AB Stockholm Sweden		486 Puls & PRF - gen. Principschema				486 Pulse & PRF - gen Circuit diagram			Blad	Dat. nr 5 10 68	
									Ritn.-nr E - 48557		

C 2. 6. 70 B 10. 6 69

A 22. 2. 69

DENNA RITNING FÖRBLIVER VÅR EGENDOM ATT UTAN VÅRT MEDGIVANDE HÄRAV EJ FÅR KOPIERAS, ÅTERGIVAS, UTLÄMNAS ELLER ANVÄNDAS OVKOMMANDE ÄN FÖRELIGGET OCH BEVILJAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.

Pulse and PRF-gen. MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Toleranss Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
	Motstånd, var. Resistor, var.	200 kohm	0,25 W	20%	Bourns	3011P-1-204
	Motstånd Resistor	33 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	2,2 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	100 ohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	150 ohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	3,3 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	680Ω	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,25 W	1%	Vitrohm	MFA-TO
	Motstånd Resistor	18 kohm	0,5 W	5%	Vitrohm	SBT

Nr Pos.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
	Motstånd Resistor	18 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	22 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1,2 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	2,2 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd, var. Resistor, var.	20 kohm	1 W	5%	Helipot	78P
	Motstånd Resistor	1 kohm	0,25 W	1%	Vitrohm	MEA-TC
	Motstånd Resistor	18 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	18 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R25	Motstånd , var Resistor , var	50 kohm			Helipot	78P

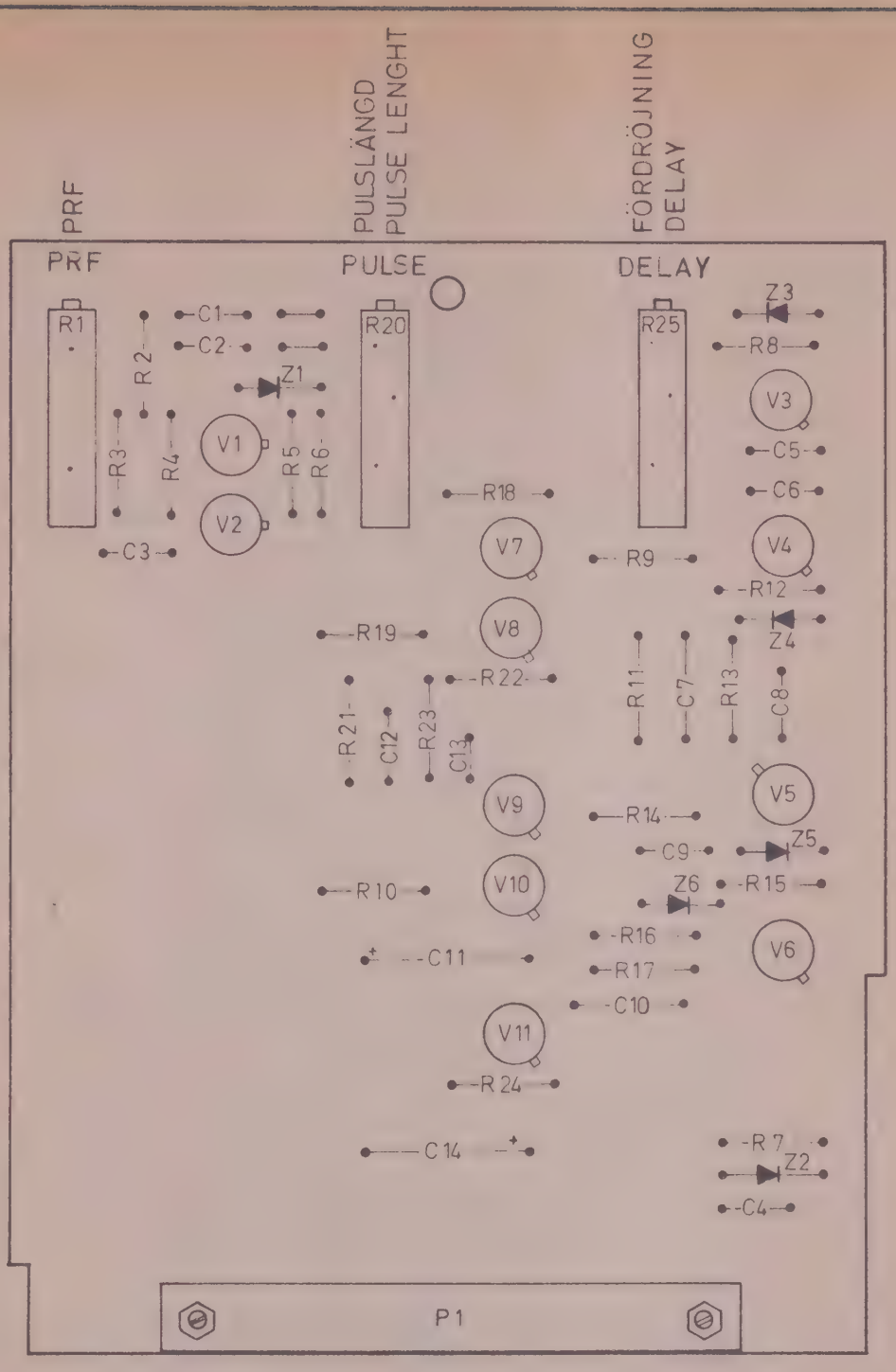
MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C1	Kondensator, MP Capacitor, MP	0,015 µF	400 V	10%	Rifa	PME 2614/ ,
C2	Kondensator, MP Capacitor, MP	0,015 µF	400 V	10%	Rifa	PME 2614/ ,
C3	Kondensator, MP Capacitor, MP	0,047 µF	250 V	20%	Rifa	PME 2602/ , 47
C4	Kondensator, MP Capacitor, MP	3300 pF	630 V	20%	Rifa	PME 2616/0,
C5	Kondensator, MP Capacitor, MP	0,015 µF	400 V	10%	Rifa	PME 2614/0,
C6	Kondensator, MP Capacitor, MP	3300 pF	630 V	10%	Rifa	PME 2614/0,0033
C7	Kondensator, PTF Capacitor, PTF	220 pF	500 V	5 %	Elmenco	CM 15
C8	Kondensator, MP Capacitor, MP	10 pF	500 V	5 %	Elmenco	CM 15
C9	Kondensator, MP Capacitor, MP	1000 pF	630 V	20%	Rifa	PME 2616/0,0
C10	Kondensator, Glimmer Capacitor, Mica	33 pF	500 V	5%	Elmenco	CM 15
C11	Kondensator, elyt Capacitor, elyt	100 µF	16 V		Rifa	PEG 111 E
C12	Kondensator, MP Capacitor, MP	1000 pF	630 V	20%	Rifa	PME 2616/0,001

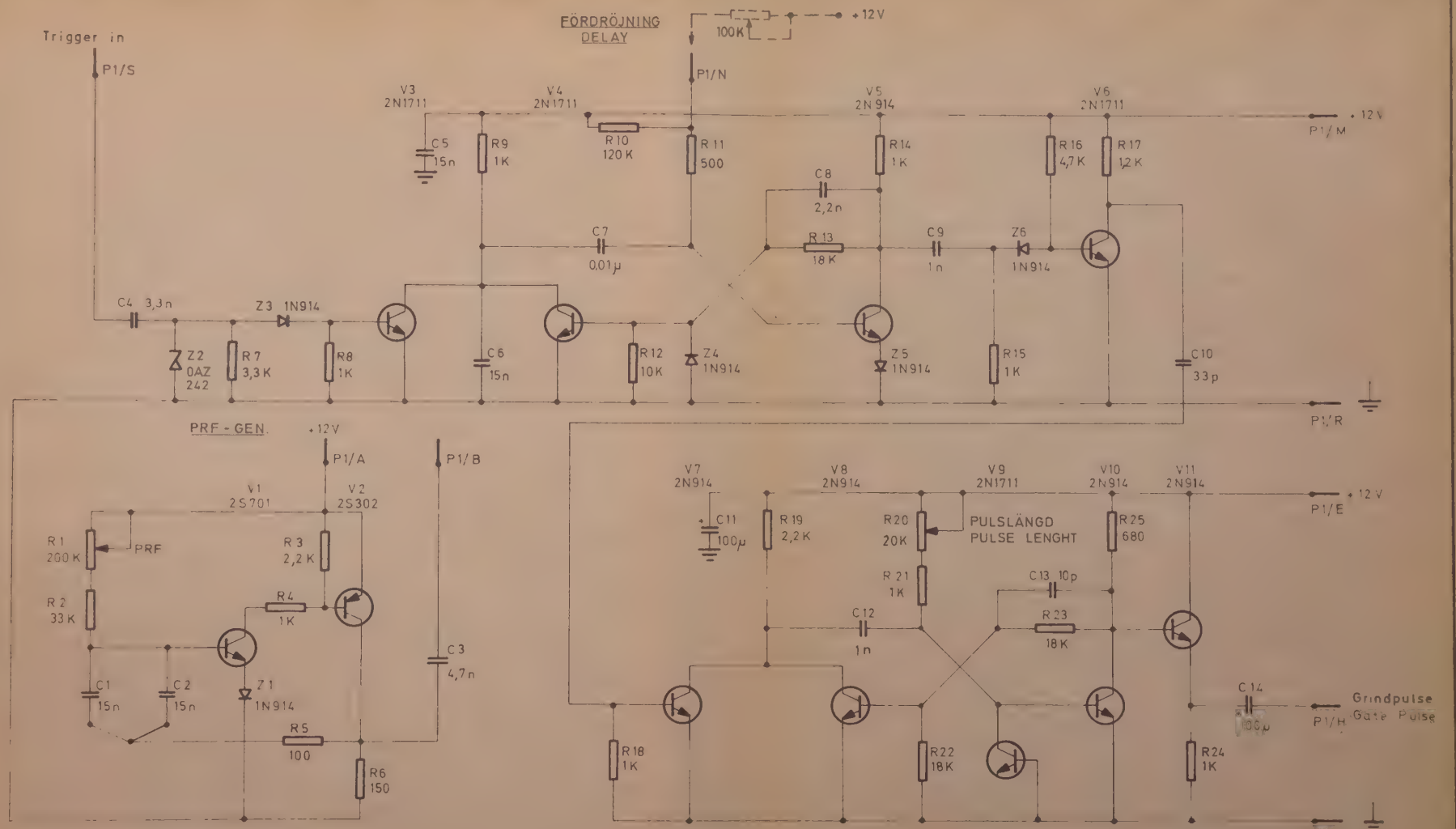
Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C13	Kondensator, Glimmer Capacitor, Mica	10 pF	500 V	5%	Elmenco	WDM 15
C14	Kondensator, elyt Capacitor, elyt	100 µF	16 V		Rifa	PEG 111 E
V1	Transistor				Texas Instrument	2 S 701
V2	Transistor				Texas Instrument	2 S 302
V3	Transistor					2 N 1711
V4	Transistor					2 N 1711
V5	Transistor					2 N 914
V6	Transistor					2 N 914
V7	Transistor					2 N 914
V8	Transistor					2 N 914
V9	Transistor					2 N 1711
V10	Transistor					2 N 914
V11	Transistor					2 N 914
Z1	Diod Diode					1 N 914
Z2	Diod, zener Diode, zener				Mullard	CAZ 242

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
Z3	Diod, Diode,					1 N 914
Z4	Diod Diode					1 N 914
Z5	Diod Diode					1 N 914
Z6	Diod Diode					1 N 914
P1	Kontakt Connector				Amphenol	133-015-03



								Måttritning E-48586		
Det. nr	Ant	Benämning			Material			Anm.		
Konstr	Ritad	Hz	Kop	Konstr.	Stand.	Godk.	Skala	Ersatter	Ersatt av	
MAGNETIC AB Stockholm Sweden		486 Puls & PRF-gen E-48557 Komponentplacering		486 Pulse & PRF-gen E-48557 Component Layout				Blad	Da 21.10.68	
								Ritn. nr E-48585		



								Moving Target	
Det. nr	Ant.	Benämning			Material			Anm.	
Konstr.	Blad L K	Kap	Kontr.	Stand	Godk.	Skala		Ersatter	Ersatt av
MAGNETIC AB Stockholm Sweden		486 0,5 µs Puls & PRF - gen. Principschema			486 0,5 µs Pulse & PRF - gen. Circuit diagram			Blad	Det. ar 5 10 68
								Ritn. nr E - 48558	

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Pulse and PRF-gen. MAGNETIC AB

Pos. No Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
	Motstånd, var. Resistor, var.	200 kohm	0,25 W	20%	Bourns	3011P-1-204
	Motstånd Resistor	33 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	2,2 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	100 ohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	150 ohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	3,3 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	120 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	500 ohm	0,25 W	1%	Vitrohm	MBA-TO
	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT

	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
	Motstånd Resistor	18 kohm	0.5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	4,7 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1,2 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	2,2 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd, var. Resistor, var.	20 kohm	1 W	5%	Helipot	78P
	Motstånd Resistor	1 kohm	0,25 W	1%	Vitrohm	MEA-TO
	Motstånd Resistor	18 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	18 kohm	0,5 W	5%	Vitrohm	SBT
	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R25	Motstånd Resistor	680 ohm	0,5	5 %	Vitrohm	SBT

Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
Kondensator, MP Capacitor, MP	0,015 µF	400 V	10%	Rifa	PME 2614/0,015
Kondensator, MP Capacitor, MP	0,015 µF	400 V	10%	Rifa	PME 2614/0,015
Kondensator, MP Capacitor, MP	4700 pF	630 V	20%	Rifa	PME 2616/0,0047
Kondensator, MP Capacitor, MP	3300 pF	630 V	20%	Rifa	PME 2616/0,0033
Kondensator, MP Capacitor, MP	0,015 µF	400 V	10%	Rifa	PME 2614/0,015
Kondensator, MP Capacitor, MP	0,015 µF	400 V	10%	Rifa	PME 2614/0,015
Kondensator, PTF Capacitor, PTF	0,01 µF	100 V	10%	Rifa	PHE 2300/0,01
Kondensator, MP Capacitor, MP	2200 pF	630 V	20%	Rifa	PME 2616/0,0022
Kondensator, MP Capacitor, MP	1000 pF	630 V	20%	Rifa	PME 2616/0,001
Kondensator, Glimmer Capacitor, Mica	33 pF	500 V	5%	Elmenco	CM 15
Kondensator, elyt Capacitor, elyt	100 µF	16 V		Rifa	PEG 111 E
Kondensator, MP Capacitor, MP	1000 pF	630 V	20%	Rifa	PME 2616/0,001

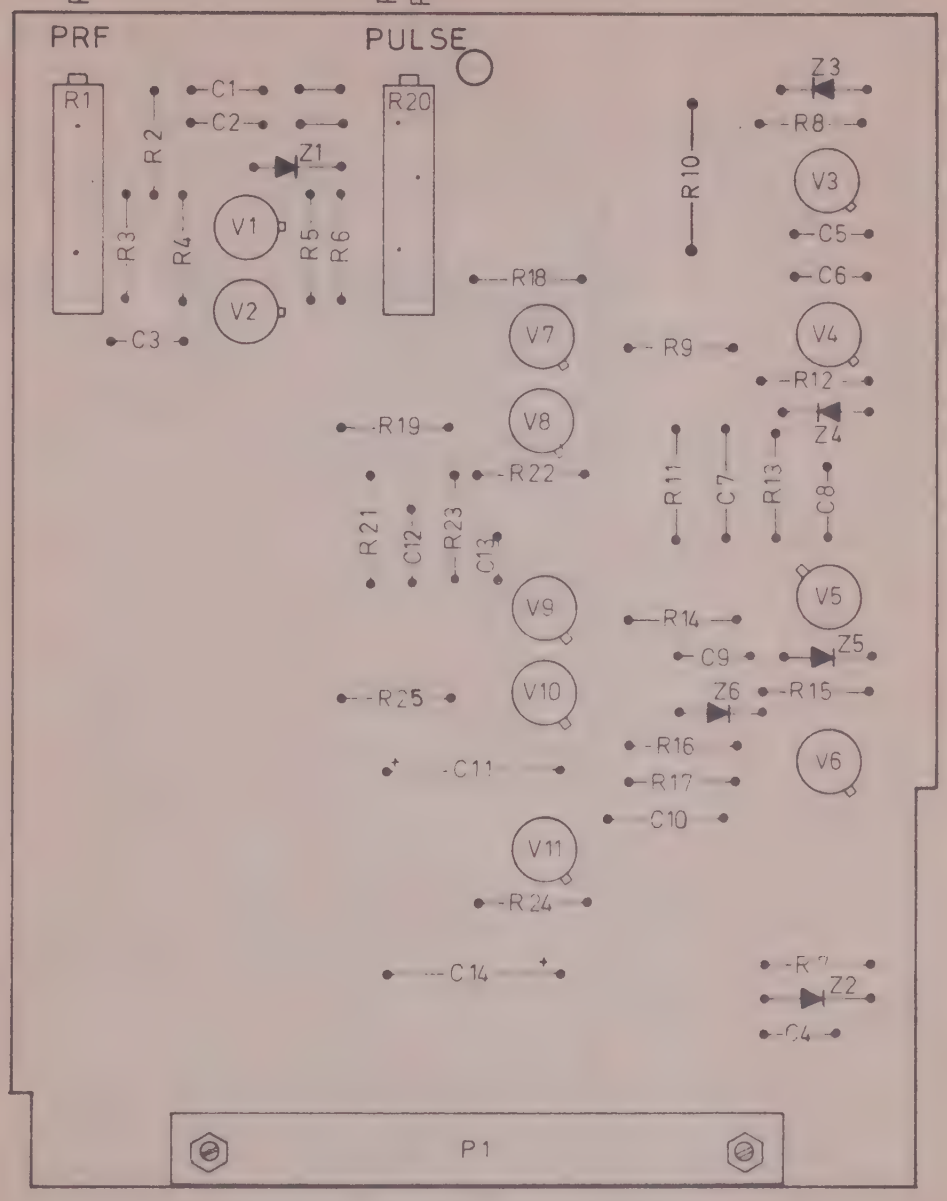
MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C13	Kondensator, Glimmer Capacitor, Mica	10 pF	500 V	5%	Flmenco	WDM 15
C14	Kondensator, elyt Capacitor, elyt	100 µF	16 V		Rifa	PEG 11.
V1	Transistor				Texas Instrument	2 N 70?
V2	Transistor				Texas Instrument	2 N 3?.
V3	Transistor					2 N 171
V4	Transistor					2 N 171.
V5	Transistor					2 N 914
V6	Transistor					2 N 1711
V7	Transistor					2 N 914
V8	Transistor					2 N 914
V9	Transistor					2 N 1711
V10	Transistor					2 N 914
V11	Transistor					2 N 914
Z1	Diod Diode					1 N 914
Z2	Diod, zener Diode, zener				Mullard	OAZ 242

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
Z3	Diod, Diode,					1 N 914
Z4	Diod Diode					1 N 914
Z5	Diod Diode					1 N 914
Z6	Diod Diode					1 N 914
P1	Kontakt Connector				Amphenol	132-016-03

DENNA RITNING ÄR VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA FÖREVISA, UTLÄMNA ELLER ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1959



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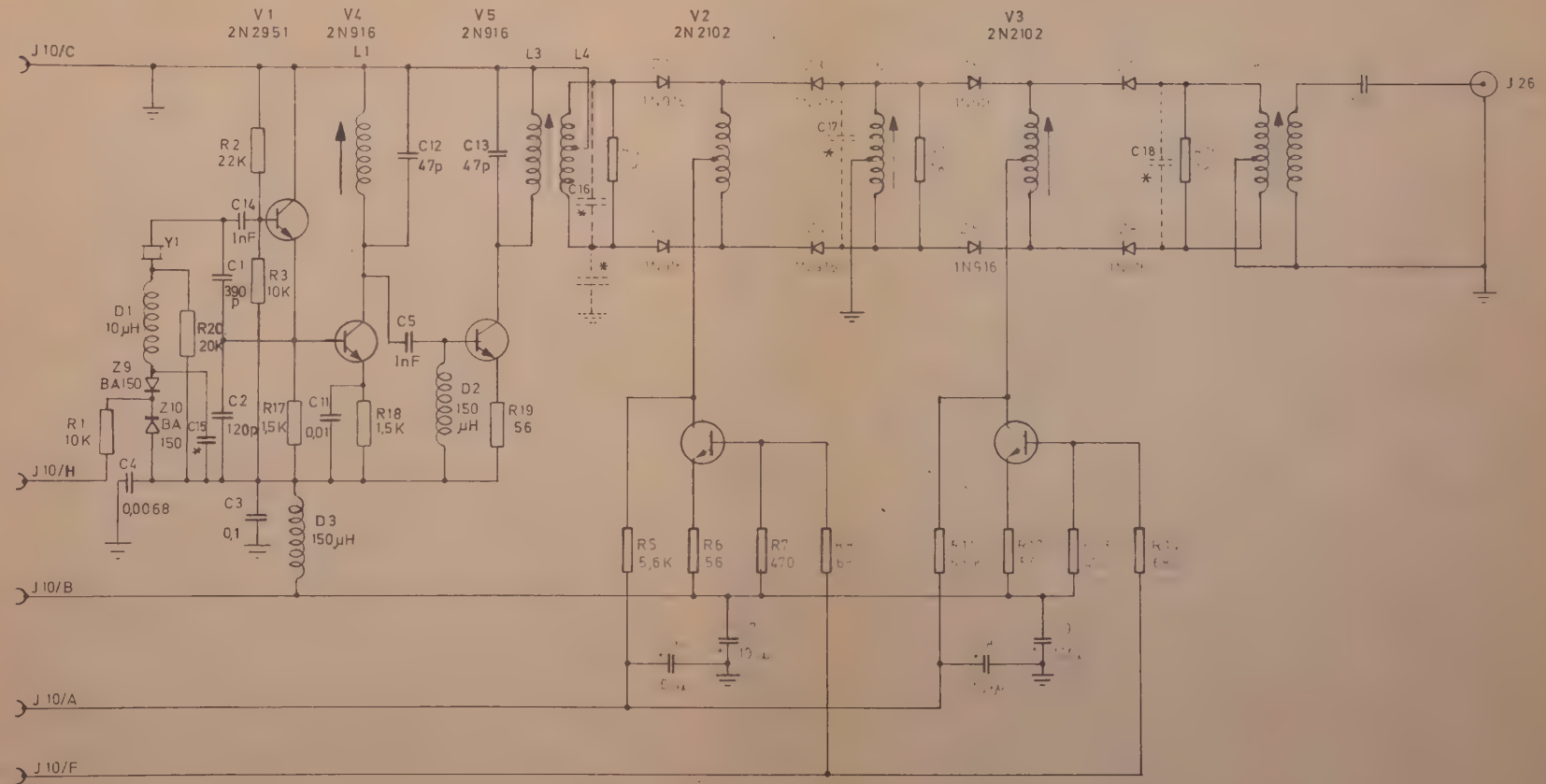
								Måttritning E-48584		
Det.-nr	Ant	Benämning		Material				Anm.		
Ritad	Hz	Kop	Kontr	Skala	Dack	Skala		Ersatt av		
MAGNETIC AB Stockholm Sweden		486 Puls & PRF-gen E-48558 Komponentplacering		486 Pulse & PRF-gen E-48558 Component Layout				Blad	Dat. 13-12-66	
								Ritn. nr E-48583		

C C15, C16, C17, C18 tillk. 13,5 MHz änd. t. 30 MHz 27.11.69 CG



*Capacitance individually selected at factory

C
B 30 6 69
A 23.5 69

Ändr. nr	Ant.	Benämning	Material		Moving Target Gate
					Anm
Konstr.	Ritad	Kap.		Godk.	Ersatt av
					Ersatt av
					Datum 29 4.69

MAGNETIC AB
Stockholm Sweden

486
30 MHz-Grind
Principschema

486
30 MHz-Gate
Circuit diagram

E-48555A

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA FÖREVISA UTLÄMNA ELLER ELLEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Varde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R1	Motstånd Resistor	10 kohm	0.25 W	5%	Kamaya	RC-1/4 S
R2	Motstånd Resistor	22 kohm	0.25 W	5%	Kamaya	RC-1/4 S
R3	Motstånd Resistor	10 kohm	0.5 W	5%	Vitrohm	SBT
R4	Motstånd Resistor	1 kohm	0.5 W	5%	Vitrohm	SBT
R5	Motstånd Resistor	5.6 kohm	0.5 W	5%	Vitrohm	SBT
R6	Motstånd Resistor	56 ohm	0.5 W	5%	Vitrohm	SBT
R7	Motstånd Resistor	470 ohm	0.5 W	5%	Vitrohm	SBT
R8	Motstånd Resistor	680 ohm	0.5 W	5%	Vitrohm	SBT
R9	Motstånd Resistor	3.3 kohm	0.5 W	5%	Vitrohm	SBT
R10	Motstånd Resistor	1 kohm	0.5 W	5%	Vitrohm	SBT
R11	Motstånd Resistor	5.6 kohm	0.5 W	5%	Vitrohm	SBT
R12	Motstånd Resistor	56 ohm	0.5 W	5%	Vitrohm	SBT
R13	Motstånd Resistor	470 ohm	0.5 W	5%	Vitrohm	SBT
R14	Motstånd Resistor	680 ohm	0.5 W	5%	Vitrohm	SBT
R15	Motstånd Resistor	3.3 kohm	0.5 W	5%	Vitrohm	SBT

E-48555A

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R16	Motstånd Resistor	1 kohm	0.5 W	5%	Vitrohm	SBT
R17	Motstånd Resistor	1.5 kohm	0.25 W	5%	Kamaya	RC-1/4 S
R18	Motstånd Resistor	1.5 kohm	0.25 W	5%	Kamaya	RC-1/4 S
R19	Motstånd Resistor	56 ohm	0.5 W	5%	Vitrohm	SBT
R20	Motstånd Resistor	20 kohm	0.25 W	5%	Kamaya	RC-1/4 S
C1	Kondensator, glimmer Capacitor, mica	390 pF	500 V	5%	Elmenco	WDM 15
C2	Kondensator, glimmer Capacitor, mica	120 pF	500 V	5%	Elmenco	WDM 15
C3	Kondensator, gker. Capacitor, cer.	0.1 uF	350 V		Erie	811
C4	Kondensator, elyt Capacitor, elyt	0.0068 uF	350 V		Erie	811
C5	Kondensator, ker. Capacitor, cer.	1 nF	350 V		Erie	811
C6	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Rifa	PEG 111A
C7	Kondensator, elyt Capacitor, elyt	100 uF	16 V		Rifa	PEG 111E
C8	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Rifa	PEG 111A

E-46555A

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C9	Kondensator, elyt Capacitor, elyt	100 uF	16 V		Rifa	PEG 122E
C10	Kondensator, glimmer Capacitor, mica	100 pF	500 V	5%	Elmenco	WDM 15
C11	Kondensator, ker. Capacitor, cer.	5 nF	500 V		Erie	811
C12	Kondensator, ker. Capacitor, cer.	47 pF	500 V	5%	Elmenco	WDM 15
C13	Kondensator, ker. Capacitor, cer.	47 pF	500 V	5%	Elmenco	WDM 15
C14	Kondensator, ker. Capacitor, cer.	1 nF	350 V		Erie	811
C15	Kondensator, styrol Capacitor, styrol	1 [illegible]	[illegible] V		[illegible]	
C16-C18	Kondensator, styrol Capacitor, styrol	[illegible]	[illegible] V		Ruwel	
D1	Drossel Choke	10 uH			Painton	C12 58/10/0011/10
D2	Drossel Choke	100 uH			Painton	C12 58/10/0013/10
D3	Drossel Choke	150 uH			Painton	C12 58/10/0013/10
J10	Kontakt Connector	8 pol			Amphenol	126-221
J11	Kontakt Connector	BNC				UG-625/U
J12	Kontakt Connector	BNC				UG-625/U
J20	Kontakt Connector	BNC				UG-625/U

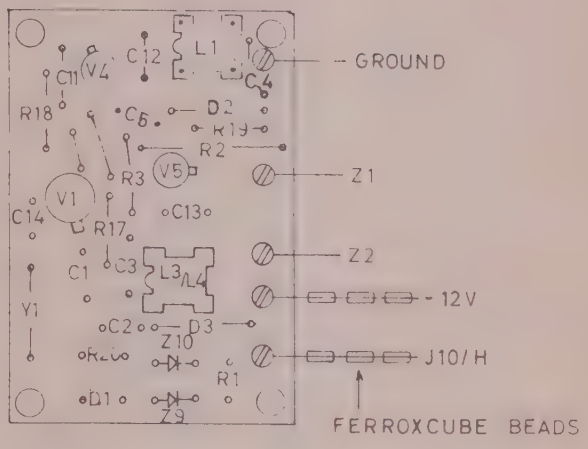
E-48555A

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
L1	Spole Coil				Magnetic AB	E-48637
L3/L4	Spole Coil				Magnetic AB	E-48638
L5	Spole Coil				Magnetic AB	E-48567
L6	Spole Coil				Magnetic AB	E-48567
L7	Spole Coil				Magneric AB	E-48567
L8/L9	Spole Coil				Magnetic AB	E-48568
V1	Transistor				Motorola	2N 2951
V2	Transistor					2N 2102
V3	Transistor					2N 2102
V4	Transistor					2N 916
V5	Transistor					2N 916
Z1	Diod Diode					1N 916
Z2	Diod Diode					1N 916
Z3	Diod Diode					1N 916
Z4	Diod Diode					1N 916
Z5	Diod Diode					1N 916

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
Z6	Diod Diode					1N 916
Z7	Diod Diode					1N 916
Z8	Diod Diode					1N 916
Z9	Diod Diode	Varicap			Telefunken	BA 150
Z10	Diod	Varicap			Telefunken	BA 150
Y1	Styrkristall Quartz-Crystal Series Resonance X-tal	10.003 MHz			Sv. Elektroinstr.	HC 6/U

DENNA RITNING FÖRBLIVER VAR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER FLJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3



B
30 6
69

A
23 4
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Det.-nr	Ant	Benämning	Material	Anm.

Konstr.	Ritad R O	Kop	Konstr	Stand.	Godk	Skala	Ersätter	Ersatt av

MAGNETIC AB
Stockholm Sweden

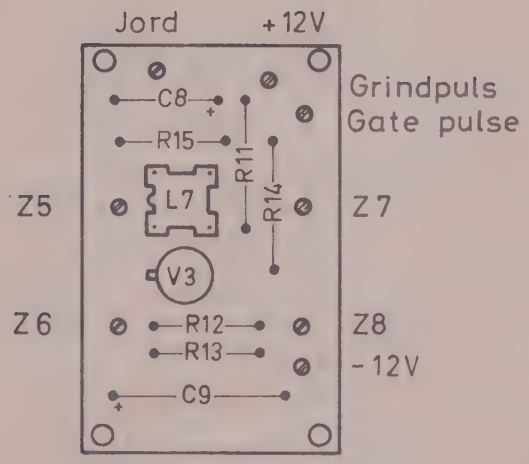
MTI TEST GENERATOR 486
30 MHz GATE
E-48555A BOARD A1a
COMPONENT LAYOUT

Blad

Dat 22.4.69

Ritn.-nr E-48576A

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



Måttritning E-480116

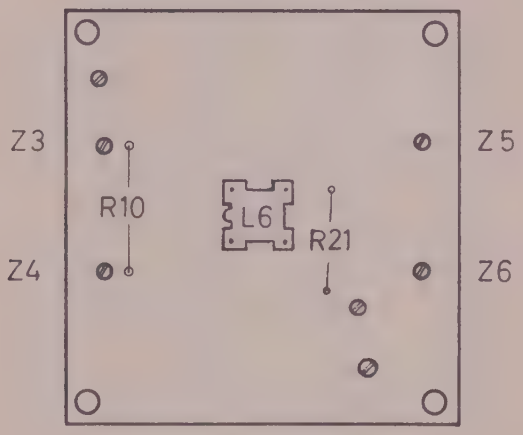
Det.-nr	Ant.	Benämning	Material	Anm.

Konstr.	Ritad	Kop.	Konstr.	Stand.	Godk.	Skala	Ersätter	Ersatt av
	Hz					1 : 1		

MAGNETIC AB Stockholm Sweden	MF-Provgen. 480-2 13,5 MHz - Grind E-480110 Kort B Komponentplacering	IF-Test gen. 480-2 13,5 MHz - Gate E-480110 Board B Component Layout	Blad	Da. 10-1-67
			Ritn.-nr E-480112-2	

4118 Wilhelmsons Tr. AB. Sthlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



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22.5
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Måttritning E-480117

Det.-nr	Ant.	Benämning	Material	Anm.

Konstr.	Ritad Hz	Kop.	Konstr.	Stand.	Godk.	Skala 1:1	Ersätter	Ersatt av

MAGNETIC AB
Stockholm Sweden

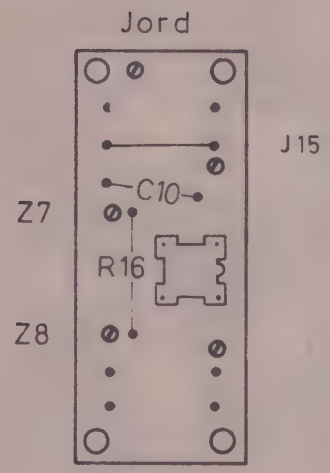
MF-PROVGEN. 480-2
13,5 MHz - Grind
E-480110
Kort C
Komponentplacering

IF-TEST GEN. 480-2
13,5 MHz - Gate
E-480110
Board C
Component Layout

Blad	Da. 7-12-66
Ritn.-nr	E-480113

4118 Wilkensons Tr AB Sthlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



Måttritning E-480118

Det.-nr	Ant.	Benämning	Material	Anm.

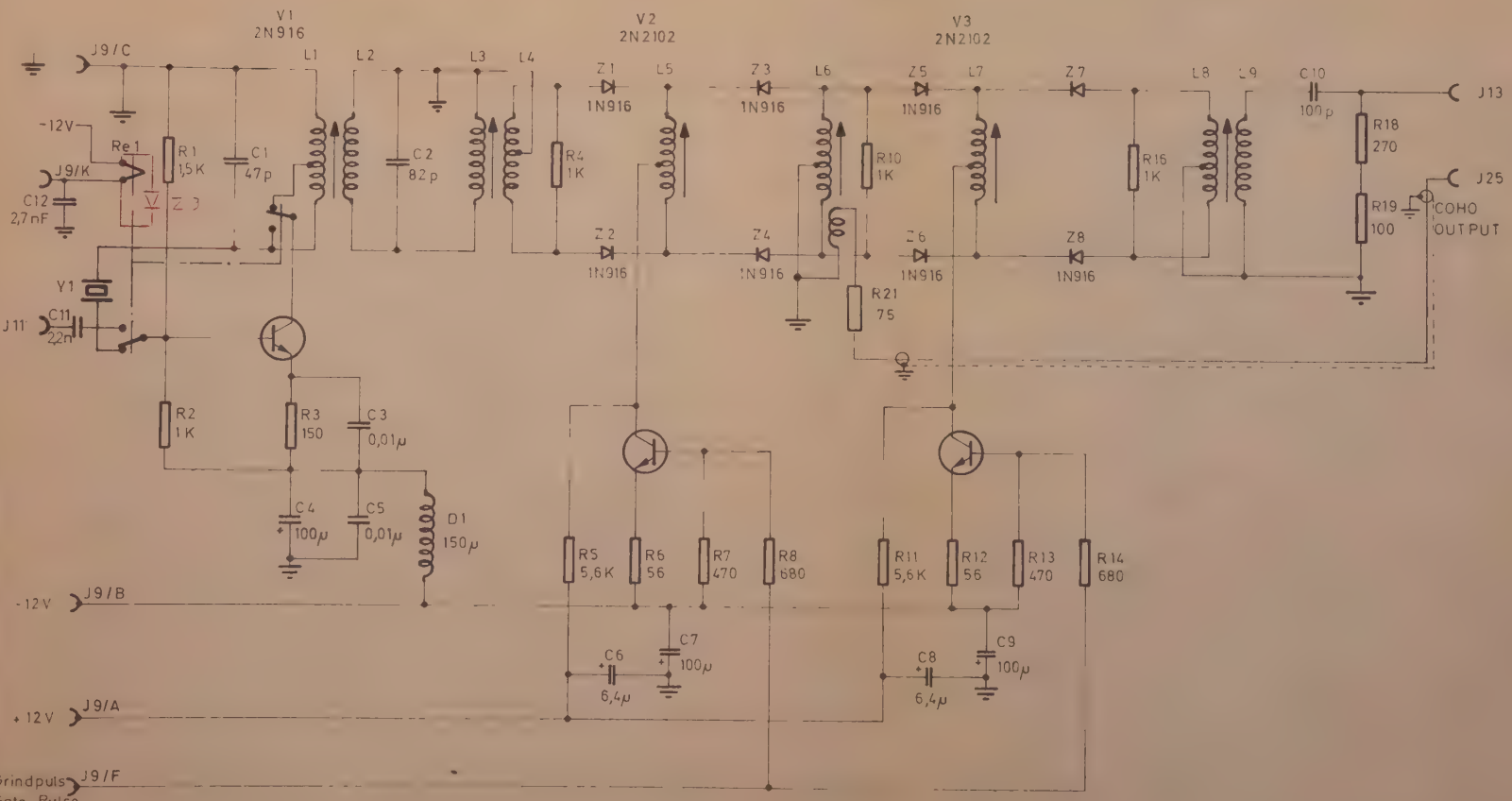
Konstr.	Ritad Hz	Kop	Konstr.	Stand	Godk.	Skala 1:1	Ersätter	Ersatt av

MAGNETIC AB
Stockholm Sweden

MTI TEST GENERATOR 486
30 MHz Gate E-48555
Board D
Component layout

Blad	Da. 5.12.68
Ritn.-nr	E-48590

4118 Wilhelmsons Tr. AB Bihlm



Det. nr	Ant.	Benämning	Material	Anm.
Konstr.	Ritad L.K.	Kap	Kontr.	Stand.	Godk.	Skala	Ersatter	Ersatt av
MAGNETIC AB Stockholm Sweden	FAST MÅL GRIND Principschema	FIXED TARGET GATE Circuit diagram	Blad	Dat. nr 23 10 68
			Ritn.-nr E-48554

C 22 5 69
B 20 2 69
A 5 12 68

30 MHz-Gate MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R1	Motstånd Resistor	1,5 kohm	0,5 W	5%	Vitrohm	SBT
R2	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R3	Motstånd Resistor	150 ohm	0,5 W	5%	Vitrohm	SBT
R4	Motstånd Resistor	1 kohm	0,5W	5%	Vitrohm	SBT
R5	Motstånd Resistor	5,6 kohm	0,5 W	5%	Vitrohm	SBT
R6	Motstånd Resistor	56 ohm	0,5 W	5%	Vitrohm	SBT
R7	Motstånd Resistor	470 ohm	0,5 W	5%	Vitrohm	SBT
R8	Motstånd Resistor	680 ohm	0,5 W	5%	Vitrohm	SBT
R9	Motstånd Resistor	3,3 kohm	0,5 W	5%	Vitrohm	SBT
R10	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R11	Motstånd Resistor	5,6 kohm	0,5 W	5%	Vitrohm	SBT
R12	Motstånd Resistor	56 ohm	0,5 W	5%	Vitrohm	SBT

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R13	Motstånd Resistor	470 ohm	0,5 W	5%	Vitrohm	SBT
R14	Motstånd Resistor	680 ohm	0,5 W	5%	Vitrohm	SBT
R15	Motstånd Resistor	3,3 kohm	0,5 W	5%	Vitrohm	SBT
R16	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R17	Motstånd Resistor	82 ohm	0,5 W	5%	Vitrohm	SBT
R18	Motstånd Resistor	270 ohm	0,5 W	5%	Vitrohm	SBT
R19	Motstånd Resistor	100 ohm	0,5 W	5%	Vitrohm	SBT
R20	Motstånd Resistor	100 ohm	0,5 W	5%	Vitrohm	SBT
R21	Motstånd Resistor	75 ohm	0,5 W	5%	Vitrohm	SBT
C1	Kondensator, glimmer Capacitor, mica	47 pF	500 V	5%	Elmenco	WDM 15
C2	Kondensator, glimmer Capacitor, mica	82 pF	500 V	5%	Elmenco	WDM 15
C3	Kondensator, ker. Capacitor, cer.	0,01 µF	350 V		Erie	811
C4	Kondensator, elyt Capacitor, elyt	100 µF	16 V		Rifa	PEG 111 E

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C5	Kondensator, ker. Capacitor, cer.	0.01 uF	350 V		Erie	811
C6	Kondensator, elyt. Capacitor, elyt	6.4 uF	25 V		Rifa	PEG 111A
C7	Kondensator, elyt Capacitor, elyt	100 uF	16 V		Rifa	PEG 111E
C8	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Rifa	PEG 111A
C9	Kondensator, elyt Capacitor, elyt	100 uF	16 V		Rifa	PEG 111E
C10	Kondensator, glimmer Capacitor, mica	100 pF	500 V	5%	Elmenco	WDM 15
C11	Kondensator, ker. Capcitor, cer.	2.2 nF	500 V		Erie	811
C12	Kondensator, ker. Capacitor, cer.	2.7 nF	500 V		Erie	811
D1	Drossel Choke	150 uH			Drawlowid	K.91 01/150-150 uH
J10	Kontakt Connector	9 pol			Amphenol	126-221
J11	Kontakt Connector	BNC				UG-625/U
J12	Kontakt Connector	BNC				UG-625/U
L1/L2	Spole Coil				Magnetic AB	E-48565
L3/L4	Spole Coil				Magnetic AB	E-48566

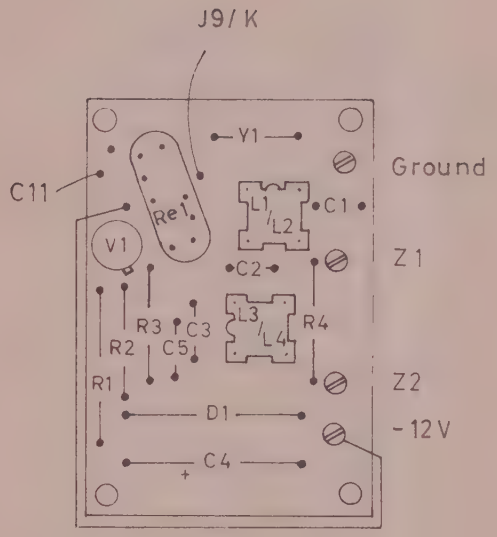
MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
L5	Spole Coil				Magnetic AB	E-48567
L6	Spole Coil				Magnetic AB	E-48591
L7	Spole Coil				Magnetic AB	E-48567
L8/L9	Spole Coil				Magnetic AB	E-48568
V1	Transistor				Motorola	2 N 916
V2	Transistor					2 N 2102
V3	Transistor					2 N 2102
Z1	Diod Diode					1 N 916
Z2	Diod Diode					1 N 916
Z3	Diod Diode					1 N 916
Z4	Diod Diode					1 N 916
Z5	Diod Diode					1 N 916

MAGNETIC AB

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
Z6	Diod Diode					1 N 916
Z7	Diod Diode					1 N 916
Z8	Diod Diode					1 N916
Z9	Diod Diode					1N463
Y1	Styrkristall Quartz-Crystal	29,995 MHz			Sv. Elektroinstr.	HC 6/U
Re1	Relä Relay	24V 600 ohm			TFA (LME)	RZO-20101

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



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20.2.
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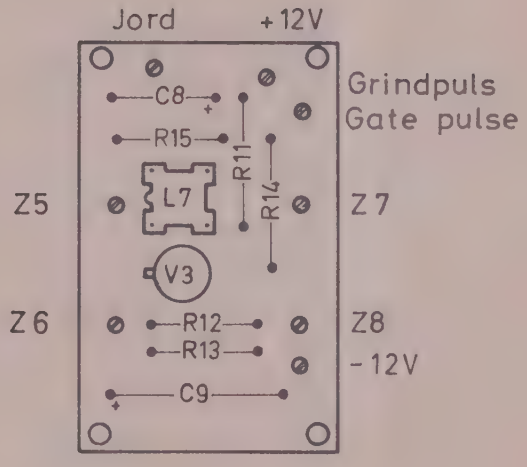
							Måttritning E-48575		
Det.-nr	Ant.	Benämning		Material			Anm.		
Konstr.	Ritad	Kop.	Konstr.	Stand.	Godk.	Skala	Ersätter	Ersatt av	
MAGNETIC AB Stockholm Sweden		MTI TEST GENERATOR 30 MHz Gate E-48554 Board A2 Component Layout					Blad	Dat	
							Ritn -nr E-48577		

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



Måttritning E-480116

Det.-nr	Ant.	Benämning	Material	Anm.

Konstr.	Ritad Hz	Kop.	Konstr.	Stand.	Godk.	Skala 1:1	Ersätter	Ersatt av

MAGNETIC AB
Stockholm Sweden

MF-Provgen. 480-2
13,5 MHz - Grind
E-480110
Kort B
Komponentplacering

IF-Test gen. 480-2
13,5 MHz - Gate
E-480110
Board B
Component Layout

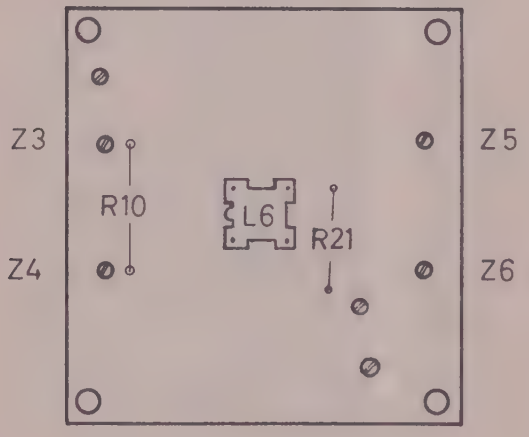
Blad

Da. 10-1-67

Ritn.-nr
E-480112-2

4118 Wikanderssons Tr AB Sthlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



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22.5
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Måttritning E-480117

Det.-nr	Ant.	Benämning	Material	Anm.

Konstr.	Ritad Hz	Kop.	Konstr.	Stand.	Godk.	Skala 1:1	Ersätter	Ersatt av
							Blad	Da. 7-12-66

MAGNETIC AB
Stockholm Sweden

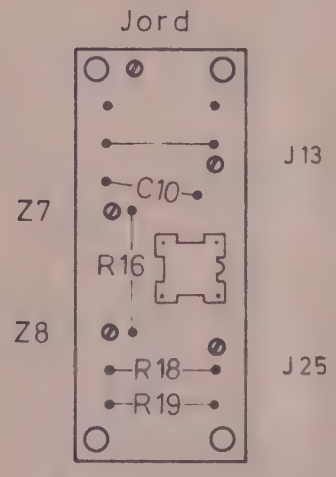
MF-PROVGEN. 480-2
13,5 MHz - Grind
E-480110
Kort C
Komponentplacering

IF-TEST GEN. 480-2
13,5 MHz - Gate
E-480110
Board C
Component Layout

Ritn.-nr
E-480113

4118 Wilkensons Tr. AB. Sthlm

DENNA RITNING FÖRBEHÅLLER VÅR EGENDOM. ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



Måttritning E-480118

Det.-nr	Ant.	Benämning	Material	Anm.

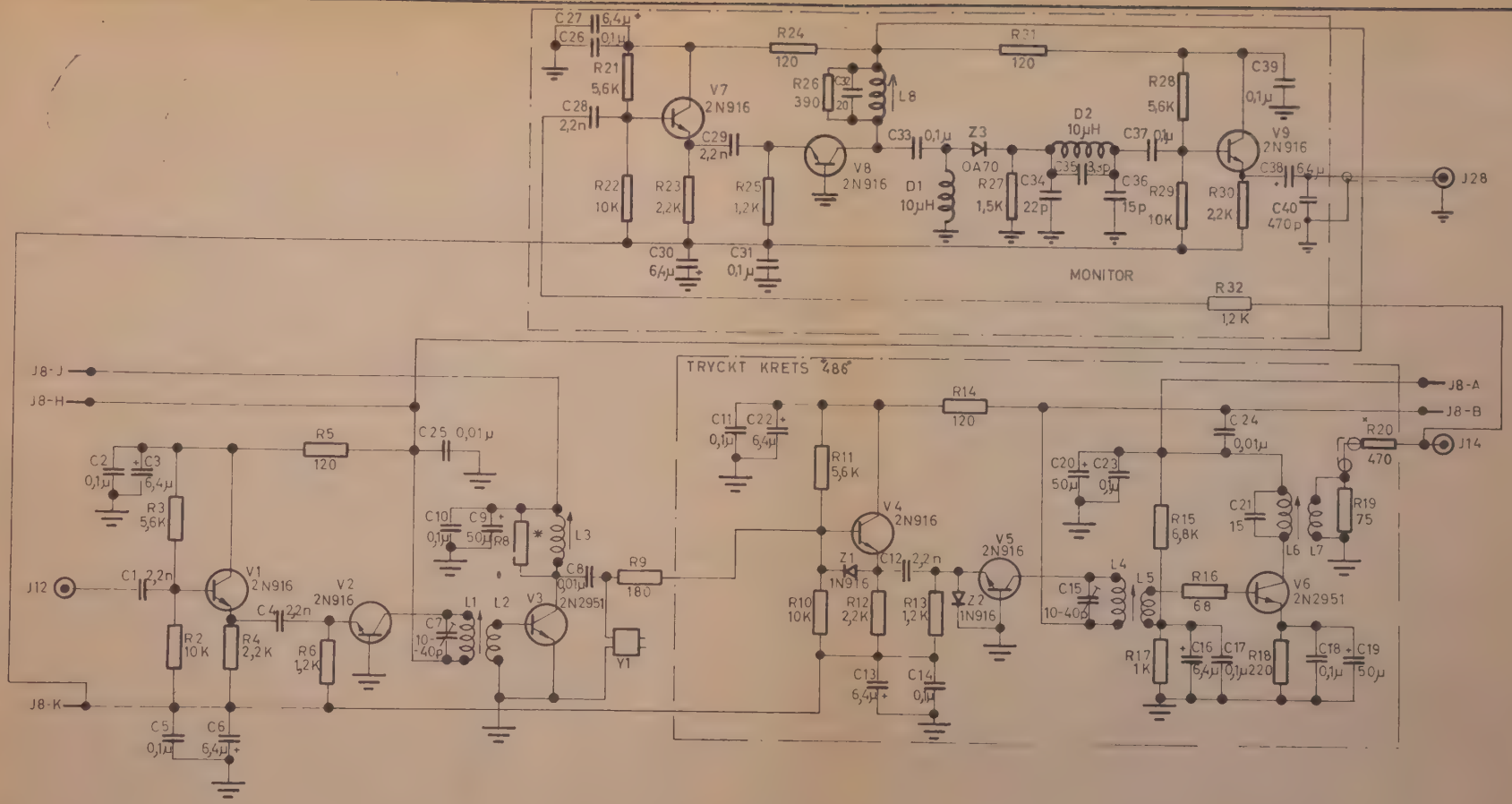
Konstr.	Ritad Hz	Kop.	Konstr.	Stand.	Godk.	Skala 1:1	Ersätter	Ersatt av

MAGNETIC AB
Stockholm Sweden

MTI TEST GENERATOR 486
30 MHz Gate E-48554
Board D
Component layout

Blad	Da. 5.12.68
Ritn.-nr	E-48589

411 Wilhelmsons Tr AB Sthlm



									Komp plac ritn E-48506	
Det. nr	Ant.	Benämning			Material				Anm	
Konstr	Ritad	Kon	Kontr	Stand	Godk	Skala			Ersatter	Ersatt av
MAGNETIC AB Stockholm Sweden		MTI TEST GENERATOR 486 MTI AMPLIFIER CIRCUIT DIAGRAM							Blad	Dat 23 10 68
									Ritn nr E-48550	

F	30 4 70 LT
E	27 11 69 CG
D	8 10 69 LT
C	12 8 69 CG
B	20 2. 69
A	5 12 68

UTAN MAGNETIC AB:S SKRIFTLIGA MEDGIVANDE ÅTNJUTES OBEHÖRIGA ÅTGÄRDER ELLER ÖVERLÄMNAS TILL OBEHÖRIG. ÖVERTRÄDELSE DÄRAV BESTRAFFAS ENLIGT LAG OM SKYDD MOT OTILLBÖRLIG KONKURRENS DEN 29 MAJ 1931 § 3

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R2	Motstånd Resistor	10 kohm	0.5 W	5%	Vitrohm	SBT
R3	Motstånd Resistor	5.6 kohm	0.5 W	5%	Vitrohm	SBT
R4	Motstånd Resistor	2.2 kohm	0.5 W	5%	Vitrohm	SBT
R5	Motstånd Resistor	120 ohm	0.5 W	5%	Vitrohm	SBT
R6	Motstånd Resistor	1.2 kohm	0.5 W	5%	Vitrohm	SBT
R7						
R8	Motstånd Resistor	x)	0.5 W	5%	Vitrohm	SBT
R9	Motstånd Resistor	180 ohm	0.5 W	5%	Vitrohm	SBT
R10	Motstånd Resistor	10 kohm	0.5 W	5%	Vitrohm	SBT
R11	Motstånd Resistor	5.6 kohm	0.5 W	5%	Vitrohm	SBT
R12	Motstånd Resistor	2.2 kohm	0.5 W	5%	Vitrohm	SBT
R13	Motstånd Resistor	1.2 kohm	0.5 W	5%	Vitrohm	SBT
R14	Motstånd Resistor	120 ohm	0.5 W	5%	Vitrohm	SBT

x) Utprovas
To be selected

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R15	Motstånd Resistor	6.8 kohm	0.5 W	5%	Vitrohm	SBT
R16	Motstånd Resistor	68 ohm	0.5 W	5%	Vitrohm	SBT
R17	Motstånd Resistor	1 kohm	0.5 W	5%	Vitrohm	SBT
R18	Motstånd Resistor	220 ohm	0.5 W	5%	Vitrohm	SBT
R19	Motstånd Resistor	75 ohm	0.5 W	5%	Vitrohm	SBT
R20	Motstånd Resistor	470 ohm	0.5 W	5%	Vitrohm	SBT
R21	Motstånd Resistor	5.6 kohm	0.5 W	5%	Vitrohm	SBT
R22	Motstånd Resistor	10 kohm	0.5 W	5%	Vitrohm	SBT
R23	Motstånd Resistor	2.2 kohm	0.5 W	5%	Vitrohm	SBT
R24	Motstånd Resistor	120 ohm	0.5 W	5%	Vitrohm	SBT
R25	Motstånd Resistor	1.2 kohm	0.5 W	5%	Vitrohm	SBT
R26	Motstånd Resistor	390 ohm	0.5 W	5%	Vitrohm	SBT
R27	Motstånd Resistor	1.5 kohm	0.5 W	5%	Vitrohm	SBT
R28	Motstånd Resistor	5.6 kohm	0.5 W	5%	Vitrohm	SBT
R29	Motstånd Resistor	10 kohm	0.5 W	5%	Vitrohm	SBT

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R30	Motstånd Resistor	2.2 kohm	0.5 W	5%	Vitrohm	SBT
R31	Motstånd Resistor	1,2 Kohm	1/4 W	5%	Kamaya	RC-1/4s
R32	Motstånd Resistor	1,2 Kohm	0.25 W	5%	Kamaya	RC-1/4s
C1	Kondensator ker.skiv. Capacitor, cer.disc.	2.2 nF	350 V		Erie	831
C2	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C3	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Philips	C426 AR/F 6.4
C4	Kondensator, ker.skiv. Capacitor, cer.disc.	2.2 nF	350 V		Erie	831
C5	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C6	Kondensator, ker.skiv. Capacitor, cer.disc.	6.4 uF	25 V		Philips	C426 AR/F 6.4
C7	Kondensator, var. Capacitor, var.	10-40 pF	250 V		Triko	D 90 Elfa 10-40 Q 2119
C8	Kondensator, ker.skiv. Capacitor, cer.disc.	0.01 uF	350 V		Erie	811
C9	Kondensator, elyt Capacitor, elyt	50 uF	100 V		Rifa	PEG 118 D
C10	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	200 V		Erie	896
C11	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C12	Kondensator, ker.skiv. Capacitor, cer.disc.	2.2 nF	350 V		Erie	831

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C13	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Philips	C426 AR/F 6.4
C14	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C15	Kondensator, var Capacitor, var.	10-40 pF	250 V		Triko	D 90
C16	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Philips	C426 AR/F 6.4
C17	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C18	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C19	Kondensator, elyt Capacitor, elyt	50 uF	25 V		Rifa	PEG 118 A
C20	Kondensator, elyt Capacitor, elyt	50 uF	100 V		Rifa	PEG 118 D
C21	Kondensator, styrol Capacitor, styrol	15 pF	500 V	2.5%	Ruwel	KF 500 - A
C22	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Philips	C426 AR/F 6.4
C23	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	200 V		Erie	896
C24	Kondensator, ker.skiv. Capacitor, cer.disc.	0.01 uF	350 V		Erie	811
C25	Kondensator, ker.skiv. Capacitor, cer.disc.	0.01 uF	350 V		Erie	811
C26	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	250 V		Erie	811 T
C27	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Philips	C426 AR/F 6.4

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
C28	Kondensator, ker.skiv. Capacitor, cer.disc.	2.2 nF	500 V		Erie	831
C29	Kondensator, ker.skiv. Capacitor, cer.disc.	2.2 nF	500 V		Erie	831
C30	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Philips	C426 AR/F 6.4
C31	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C32	Kondensator, mica Capacitor, mica	20 pF			Elmenco	DM 10 4 CR
C33	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C34	Kondensator, ker.skiv. Capacitor, cer.disc.	22 pF	500 V		Erie	831
C35	Kondensator, ker.skiv. Capacitor, cer.disc.	3.3 pF	500 V		Erie	831
C36	Kondensator, ker.skiv. Capacitor, cer.disc.	15 pF	500 V		Erie	831
C37	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C38	Kondensator, elyt Capacitor, elyt	6.4 uF	25 V		Philips	C426 AR/F 6.4
C39	Kondensator, ker.skiv. Capacitor, cer.disc.	0.1 uF	25 V		Erie	811 T
C40	Kondensator , ker. skiv.	470 pF	500V		Erie	831

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
V1	Transistor Transistor					2N 916
V2	Transistor Transistor					2N 916
V3	Transistor Transistor					2N 2951
V4	Transistor Transistor					2N 916
V5	Transistor Transistor					2N 916
V6	Transistor Transistor	) Förses med kylfläns (TAG HR 51)) With heat radiator (TAG HR 51)				2N 2951
V7	Transistor Transistor					2N 916
V8	Transistor Transistor					2N 916
V9	Transistor Transistor					2N 916
L1	Spole Coil	9 v 0.5mm				
L2	Spole Coil	5 v 0.5mm (Lindas ovanpå L1)			Magnetic AB	E-48125
L3	Spole Coil	73/4 v 0.7mm			Magnetic AB	E-48128
L4	Spole Coil	9 v 0.5mm				

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
L5	Spole Coil	4 v 0.5mm	(Lindas ovanpå L4)		Magnetic AB	E-48126
L6	Spole Coil	14 v 0.7mm				
L7	Spole Coil	6 v 0.7mm	(Lindas ovanpå L6)		Magnetic AB	E-48127
L8	Spole / Coil	14V 0,7mm			Magnetic AB	
D1	Drossel Choke	10 uH			Dralowid	
D2	Drossel / Choke	10 µH			Dralowid	
Y1	Fördröjnings ledn. Delay line	10 us			Microsonics Inc.	2140
J8	Kontakt Connector				Amphenol	126-221
J12	Kontakt koax. Connector coax.	BNC				UG-625/U
J14	Konktakt koax. Connector coax.	BNC				UG-625/U
J28	Kontakt koax. Connector coax.					UG-291A/U
Z1	Diod Diode					IN 916
Z2	Diod Diode					IN 916
Z3	Diod Diode					OA 90
	1 st Kylfläns Heat radiators				Transistor AG	HR 51

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.

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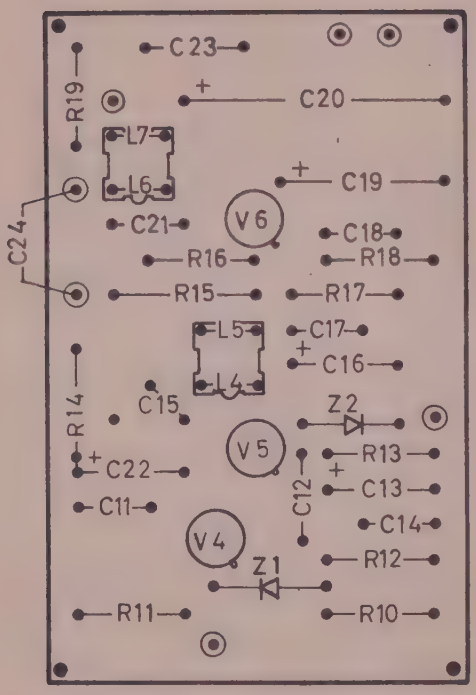

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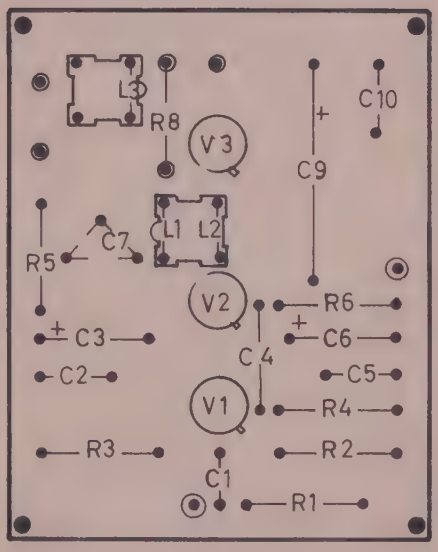
	2							Måttritning E-48607-1	
Det.-nr	Ant.	Benämning			Material			Anm.	
Konstr.	Ritad	Kop.	Konstr.	Stand.	Godk.	Skala		Ersätter	Ersatt av
								Blad 1 (2)	Da. 16.6.65
MAGNETIC AB Stockholm Sweden		MF KLOTTER GEN. 486 MTI FÖRSTÄRKARE KOMPONENTPLACERING						Ritn.-nr E-48606	

4118 Wilhansons Tr AB. Bihlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



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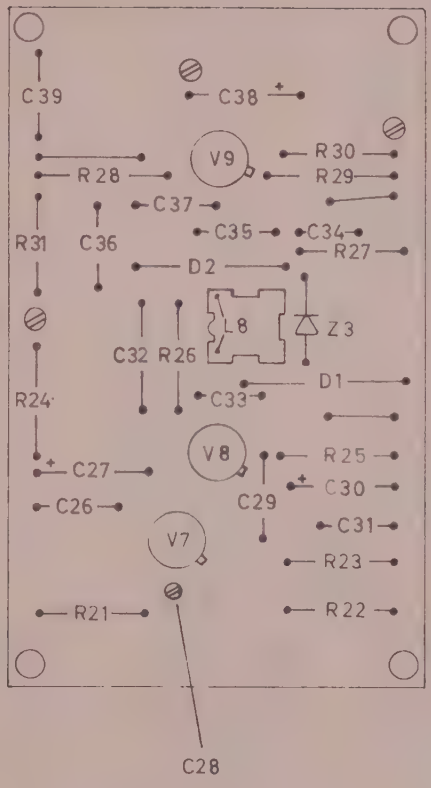
A 27.9.65

							Måttritning E-48607-2	
Det.-nr	Ant.	Benämning		Material			Anm.	
Konstr.	Ritad Pe	Kop.	Konstr.	Stand.	Godk.	Skala	Ersätter	Ersatt av
MAGNETIC AB Stockholm Sweden		MF KLOTTER GEN. 486 MTI FÖRSTÄRKARE KOMPONENTPLACERING					Blad 2 (2)	Da. 16.6.65
							Ritn.-nr E-48606	

4118 Wilhelmsens Tr AB Sthlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAM. LAG AV DEN 29 MAJ 1931 § 3.



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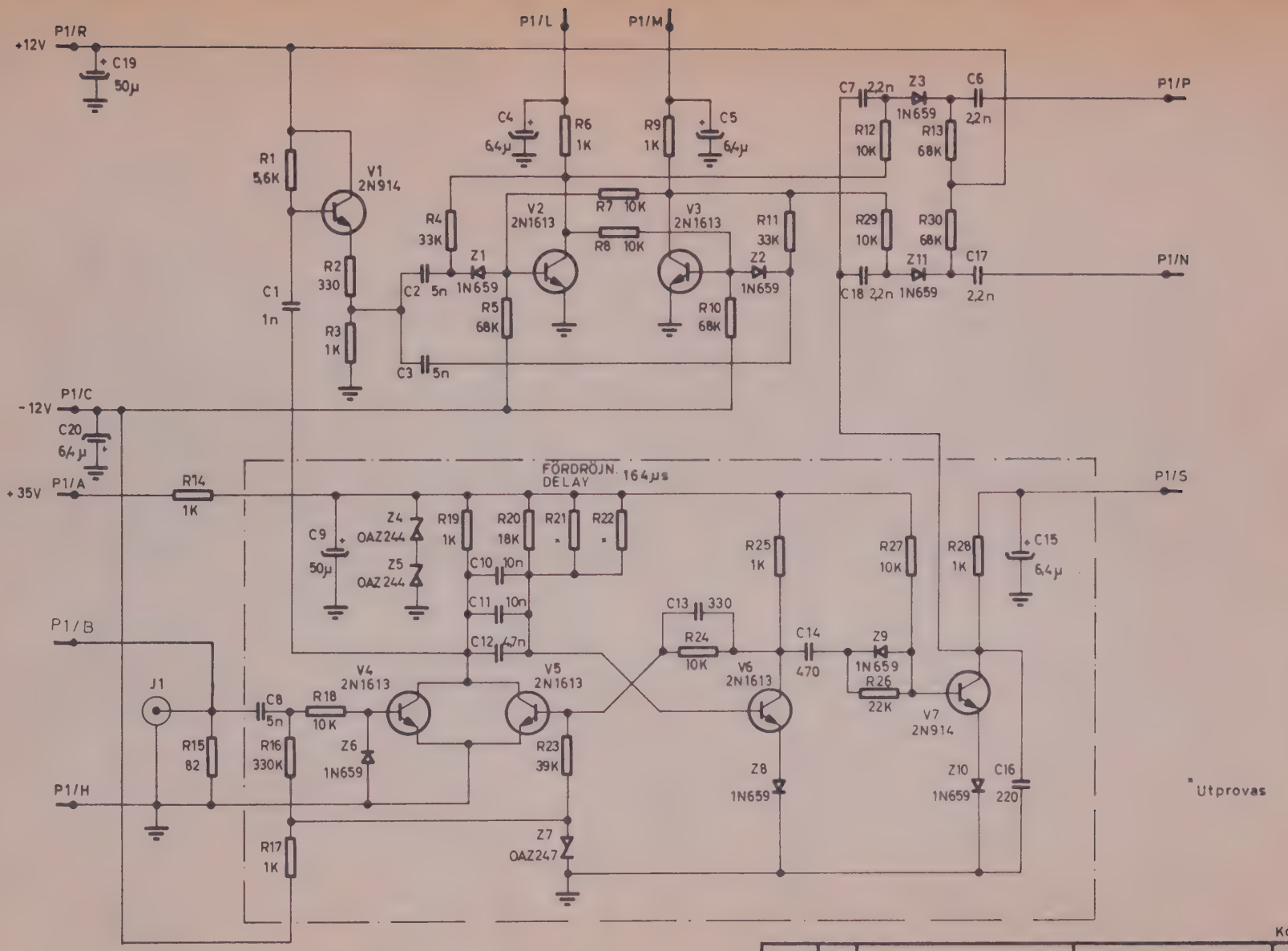
Circuit Diagram E-48550

								Måttritning 48581	
Det.-nr	Ant.	Benämning			Material			Anm.	
Konstr.	Ritad	Kop.	Konstr.	Stand.	Godk.	Skala		Ersatter	Ersatt av
MAGNETIC AB Stockholm Sweden		MTI TEST GENERATOR 486 MTI AMPLIFIER, Monitor Board Component Layout						Blad	Dat
								Ritn.-nr E-48580	



Komp plac ritn E-48712

Det. nr	Ant.	Benämning	Material	Anm.	E-48713
Konstr.	Ritad RO	Kap.	Kontr.	Ständ.	Godk.	Skala	Ersätter	Ersatt av
MAGNETIC AB Stockholm Sweden	VIDEOGENERATOR 487 Videogen. 1 Principschema. Circuit diagram.	Ritad 18 2 65	Ritn.-nr E-48701

Electrical Part List

Ref. Nr.	Benämning / Description	Värde / Value	Effekt / Power	Tolerans / Tolerance	Tillverkare / Manufacturer	Art. Nr. / Part No.
R1	Motstånd Resistor	5,6 kohm	0,5 W	5%	Vitrohm	SBT
R2	Motstånd Resistor	330 ohm	0,5 W	5%	Vitrohm	SBT
R3	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R4	Motstånd Resistor	33 kohm	0,5 W	5%	Vitrohm	SBT
R5	Motstånd Resistor	68 kohm	0,5 W	5%	Vitrohm	SBT
R6	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R7	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R8	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R9	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R10	Motstånd Resistor	68 kohm	0,5 W	5%	Vitrohm	SBT
R11	Motstånd Resistor	33 kohm	0,5 W	5%	Vitrohm	SBT
R12	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R13	Motstånd Resistor	68 kohm	0,5 W	5%	Vitrohm	SBT

Electrical Part List

Pos. nr. Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Watt.	Tolerans Tolerance	Tillverkare Manufacturer	Typ nr. Type No.
R14	Motstånd Resistor	1 kohm	1 W	5%	Vitrohm	ABT
R15	Motstånd Resistor	82 ohm	0,5 W	5%	Vitrohm	SBT
R16	Motstånd Resistor	330 kohm	0,5 W	5%	Vitrohm	SBT
R17	Motstånd Resistor	1 kohm	o,5 W	5%	Vitrohm	SBT
R18	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R19	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R20	Motstånd Resistor	18 kohm	0,5 W	5%	Vitrohm	SBT
R21	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT
R22	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT
R23	Motstånd Resistor	39 kohm	0,5 W	5%	Vitrohm	SBT
R24	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R25	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT

Electrical Part List

Pos. Nr. Pos. No.	Beteckning Description	Värde Value	Effekt Watt. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr. Part No.
R26	Motstånd Resistor	22 kohm	0,5 W	5%	Vitrohm	SBT
R27	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R28	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R29	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R30	Motstånd Resistor	68 kohm	0,5 W	5%	Vitrohm	SBT
C1	Kondensator, ker. Capacitor, cer.	1 nF	500 V		Erie	831
C2	Kondensator, ker. Capacitor, cer.	5 nF	350 V		Erie	811
C3	Kondensator, ker. Capacitor, cer.	5 nF	350 V		Erie	811
C4	Kondensator, elyt Capacitor, elyt	6,4 µF	25 V		Rifa	PEG 111A
C5	Kondensator, elyt Capacitor, elyt	6,4 µF	25 V		Rifa	PEG 111A
C6	Kondensator, ker. Capacitor, cer.	2,2 nF	500 V		Erie	831

Electrical Part List

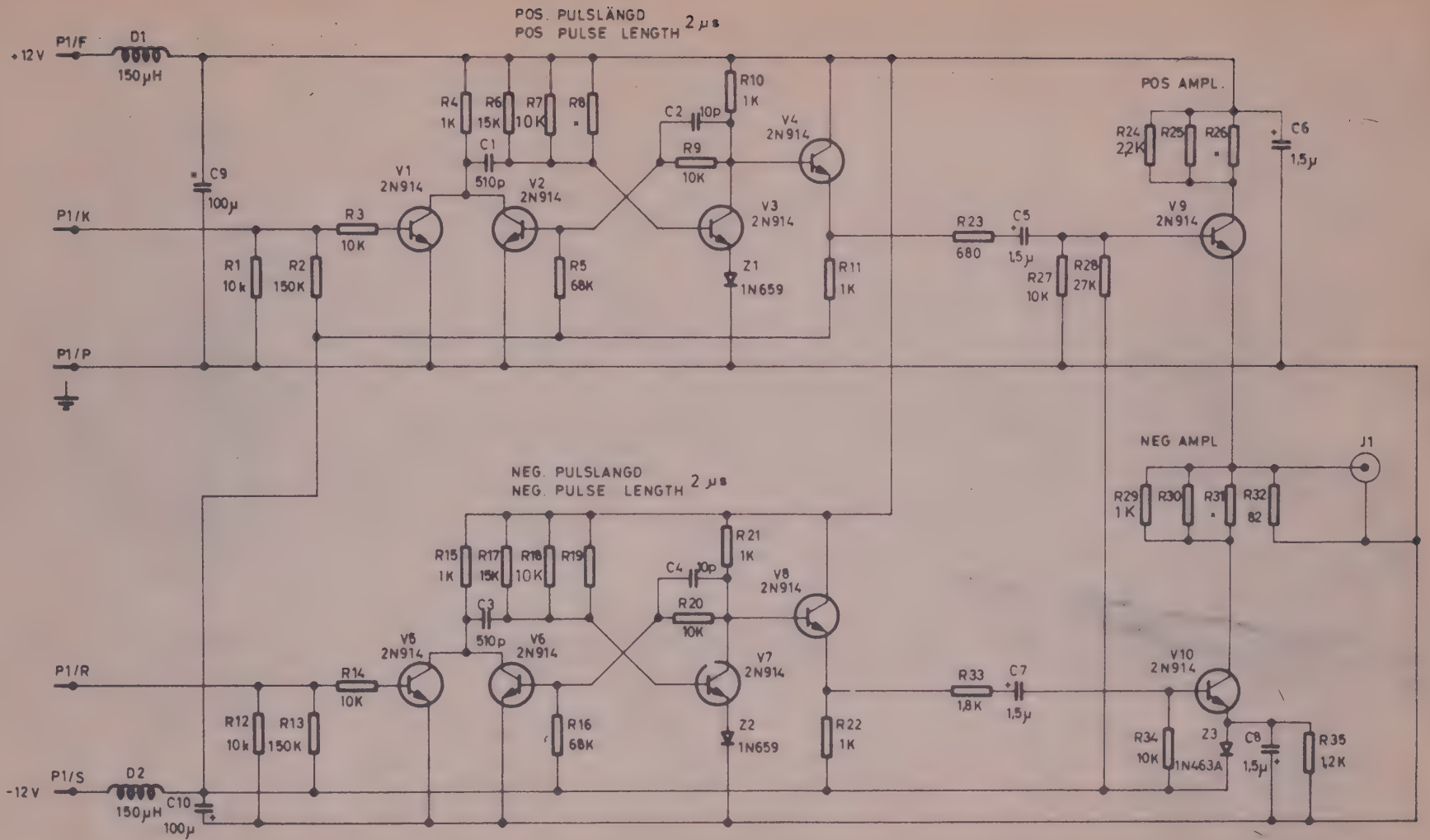
Pos. Nr. Ver. Nr.	Benämning Description	Värde Value	Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr. Part No.
C7	Kondensator, ker. Capacitor, cer.	2,2 nF	500 V		Erie	831
C8	Kondensator, ker. Capacitor, cer.	5 nF	350 V		Erie	811
C9	Kondensator, elyt Capacitor, elyt	50 µF	25 V		Rifa	PEG 111 E
C10	Kondensator, glimmer Capacitor, mica	10 nF	500 V	5%	Elmenco	WDM 30
C11	Kondensator, glimmer Capacitor, mica	10 nF	500 V	5%	Elmenco	WDM 30
C12	Kondensator, glimmer Capacitor, mica	4,7 nF	500 V	5%	Elmenco	WDM 30
C13	Kondensator, ker. Capacitor, cer.	330 pF	500 V		Erie	831
C14	Kondensator, ker. Capacitor, cer.	470 pF	500 V		Erie	831
C15	Kondensator, elyt Capacitor, elyt	6,4 µF	25 V		Rifa	PEG 111 A
C16	Kondensator, ker. Capacitor, cer.	220 pF	500 V		Erie	831
C17	Kondensator, ker. Capacitor, cer.	2,2 nF	500 V		Erie	831
C18	Kondensator, ker. Capacitor, cer.	2,2 nF	500 V		Erie	831

Electrical Part List

Pos. Nr. Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb.sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr. Part No.
C19	Kondensator, elyt Capacitor, elyt	50 µF	25 V		Rifa	PEG 111 E
C20	Kondensator, elyt Capacitor, elyt	6,4 µF	25 V		Rifa	PEG 111 A
V1	Transistor				Raytheon	2N 914
V2	Transistor				Raytheon	2N 1613
V3	Transistor				Raytheon	2N 1613
V4	Transistor				Raytheon	2N 1613
V5	Transistor				Raytheon	2N 1613
V6	Transistor				Raytheon	2N 1613
V7	Transistor				Raytheon	2N 914
Z1	Diod Diode				Raytheon	1N 659
Z2	Diod Diode				Raytheon	1N 659
Z3	Diod Diode				Raytheon	1N 659

Electrical Part List

Pos. Nr. Pos. No.	Komponentbeskrivning Description	Värde Value	Tillv. anv. nr. Part No.	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr. Part No.
Z4	Diod, zener Diode, zener				Mullard	OAZ 244
Z5	Diod, zener Diode, zener				Mullard	OAZ 244
Z6	Diod Diode				Raytheon	1N 659
Z7	Diod, zener Diode, zener				Mullard	OAZ 247
Z8	Diod Diode				Raytheon	1N 659
Z9	Diod Diode				Raytheon	1N 659
Z10	Diod Diode				Raytheon	1N 659
Z11	Diod Diode				Raytheon	1N 659
J1	Kontakt, coax. Connector, coax.				Amphenol	82-831
P1	Kontakt Connector				Amphenol	133-015-03



*Utprovas.

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												Komp plac. ritn. E-48714	
Det. nr	Ant.	Benämning				Material						Anm.	
Konstr.	Stud	R.Ö	Kop.	Kontr.	Stand.	Godk.	Skala					Ritad/Drawn	Ritad nr
MAGNETIC AB Stockholm Sweden		VIDEOGENERATOR 487-1 Videogen. 2 Principschema. Circuit diagram.										Stud	Dat. nr 19 2 65
												Skal/Scale	E-48716

Electrical Part List

					facturer	
R1	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R2	Motstånd Resistor	150 kohm	0,5 W	5%	Vitrohm	SBT
R3	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R4	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R5	Motstånd Resistor	68 kohm	0,5 W	5%	Vitrohm	SBT
R6	Motstånd Resistor	15 kohm	0,5 W	5%	Vitrohm	SBT
R7	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT
R8	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT
R9	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R10	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R11	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R12	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R13	Motstånd Resistor	150 kohm	0,5 W	5%	Vitrohm	SBT

Electrical Part List

Description	Value			Manufacturer	
R14	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R15	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R16	Motstånd Resistor	68 kohm	0,5 W	5%	Vitrohm	SBT
R17	Motstånd Resistor	15 kohm	0,5 W	5%	Vitrohm	SBT
R18	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT
R19	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT
R20	Motstånd Resistor	10 kohm	0,5 W	5%	Vitrohm	SBT
R21	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R22	Motstånd Resistor	1 kohm	0,5 W	5%	Vitrohm	SBT
R23	Motstånd Resistor	680 ohm	0,5 W	5%	Vitrohm	SBT
R24	Motstånd Resistor	2,2 kohm	0,5 W	5%	Vitrohm	SBT
R25	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT
R26	Motstånd Resistor	Utprovas Selected	0,5 W	5%	Vitrohm	SBT

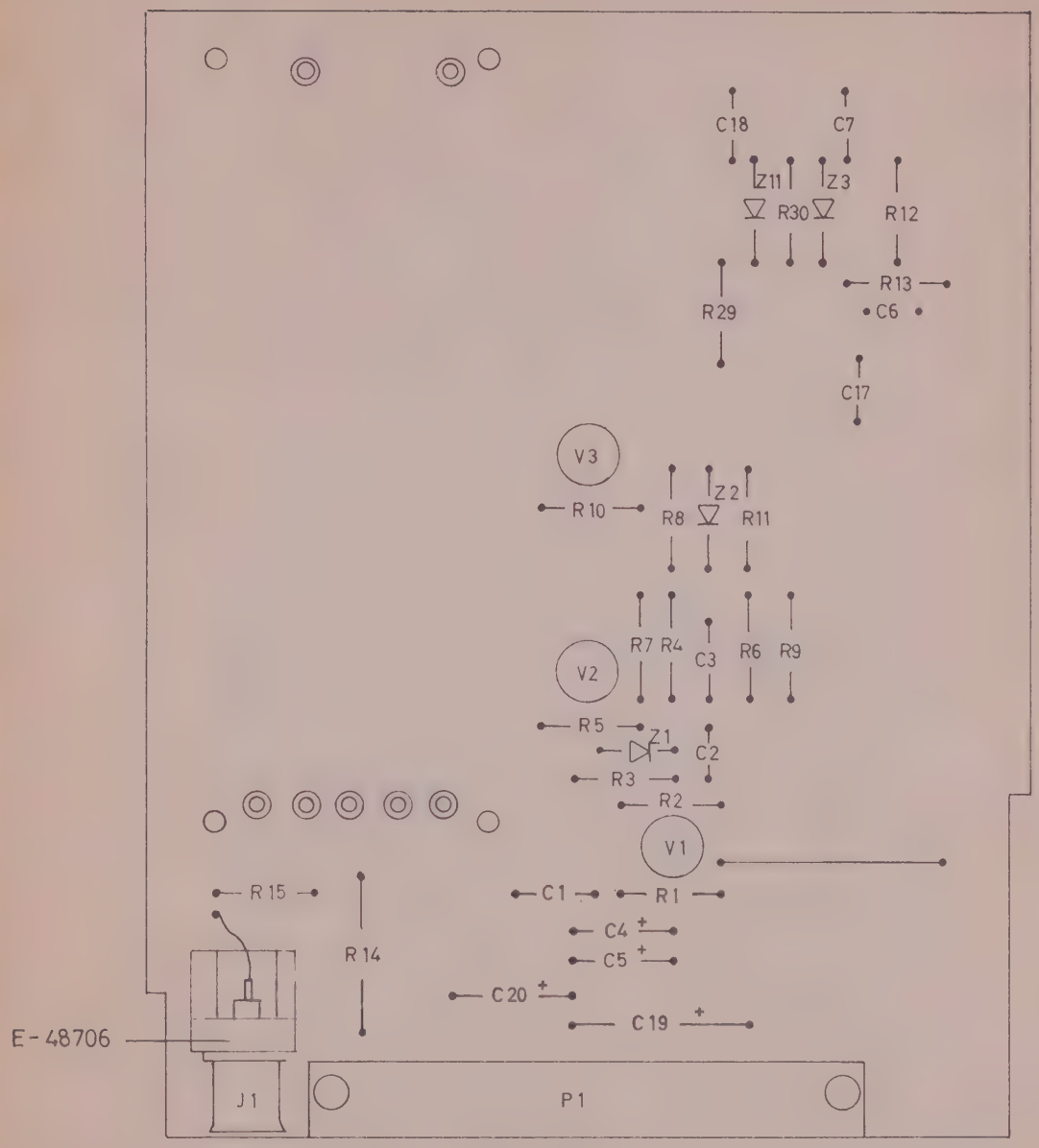
R27	Motstånd Resistor	10 kohm	0,5 W	5 %	Vitrohm	SBT
R28	Motstånd Resistor	27 kohm	0,5 W	5 %	Vitrohm	SBT
R29	Motstånd Resistor	1 kohm	0,5 W	5 %	Vitrohm	SBT
R30	Motstånd Resistor	Utprovas Selected	0,5 W	5 %	Vitrohm	SBT
R31	Motstånd Resistor	Utprovas Selected	0,5 W	5 %	Vitrohm	SBT
R32	Motstånd Resistor	82 ohm	0,5 W	5 %	Vitrohm	SBT
R33	Motstånd Resistor	1,8 kohm	0,5 W	5 %	Vitrohm	SBT
R34	Motstånd Resistor	10 kohm	0,5 W	5 %	Vitrohm	SBT
R35	Motstånd Resistor	1,2 kohm	0,5 W	5 %	Vitrohm	SBT
C1	Kondensator, glimmer Capacitor, mica	510 pF	500 V	5%	Rifa	PGD 1020 D
C2	Kondensator, ker. Capacitor, cer.	10 pF	500 V	5%	Erie	831
C3	Kondensator, glimmer Capacitor, mica	510 pF	500 V	5%	Rifa	PGD 1020D

C4	Kondensator, ker. Capacitor, cer.	10 pF	500 V		Erie	831
C5	Kondensator, tantal Capacitor, tantal	[illegible] µF	[illegible]	20%	Texas Instrument	
C6	Kondensator, tantal Capacitor, tantal	1,[illegible] µF	20 V	20%	Texas Instrument	
C7	Kondensator, tantal Capacitor, tantal	1,5 µF	20 V	20%	Texas Instrument	
C8	Kondensator, tantal Capacitor, tantal	1,5 µF	20 V	20%	Texas Instrument	
C9	Kondensator, elyt Capacitor, elyt	100 µF	16 V		Pifa	PEG 111 E
C10	Kondensator, elyt Capacitor, elyt	100 µF	16 V		Pifa	PEG 111 E
D1	Drossel Drossel	150 µH			Dralowid	K.91.01/150-150µH
D2	Drossel Drossel	150 µH			Dralowid	K.91.01/150-150µH
V1	Transistor				Raytheon	2N 914
V2	Transistor				Raytheon	2N 914
V3	Transistor				Raytheon	2N 914

Electrical Part List

	Beteckning				Tillverkare	Typ
V4	Transistor				Raytheon	2N 914
V5	Transistor				Raytheon	2N 914
V6	Transistor				Raytheon	2N 914
V7	Transistor				Raytheon	2N 914
V8	Transistor				Raytheon	2N 914
V9	Transistor				Raytheon	2N 914
V10	Transistor				Raytheon	2N 914
Z1	Diod Diode				Raytheon	1N 659
Z2	Diod Diode				Raytheon	1N 659
Z3	Diod Diode				Raytheon	1N 663A
J1 *	Kontakt, Koaxial Connector, coax.				Amphenol	82-831
P1 *	Kontakt Connector				Amphenol	133-015-03

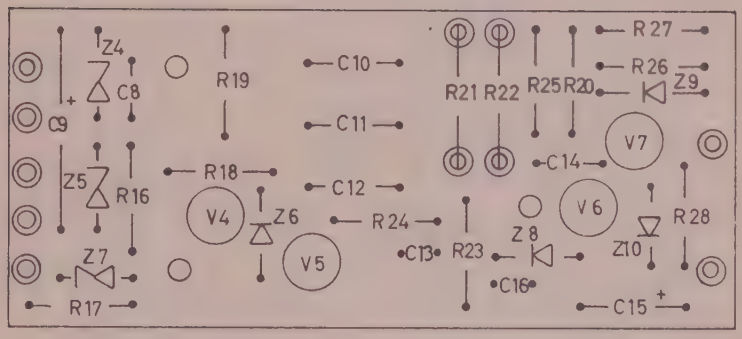
DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



								Måttritning E-48709	
Det.-nr	Ant.	Benämning		Material				Anm.	
Konstr.	Ritad R. Ö.	Kop.	Konstr.	Stand	Godk.	Skala		Ersatter	Ersatt av
MAGNETIC AB Stockholm Sweden		VIDEOGENERATOR 487 Videogenerator 1 48701 Kompontplacering.						Blad	Da 21 2.65
								Ritn.-nr E-48712	

411 Wilkensons Tr AB Sthlm

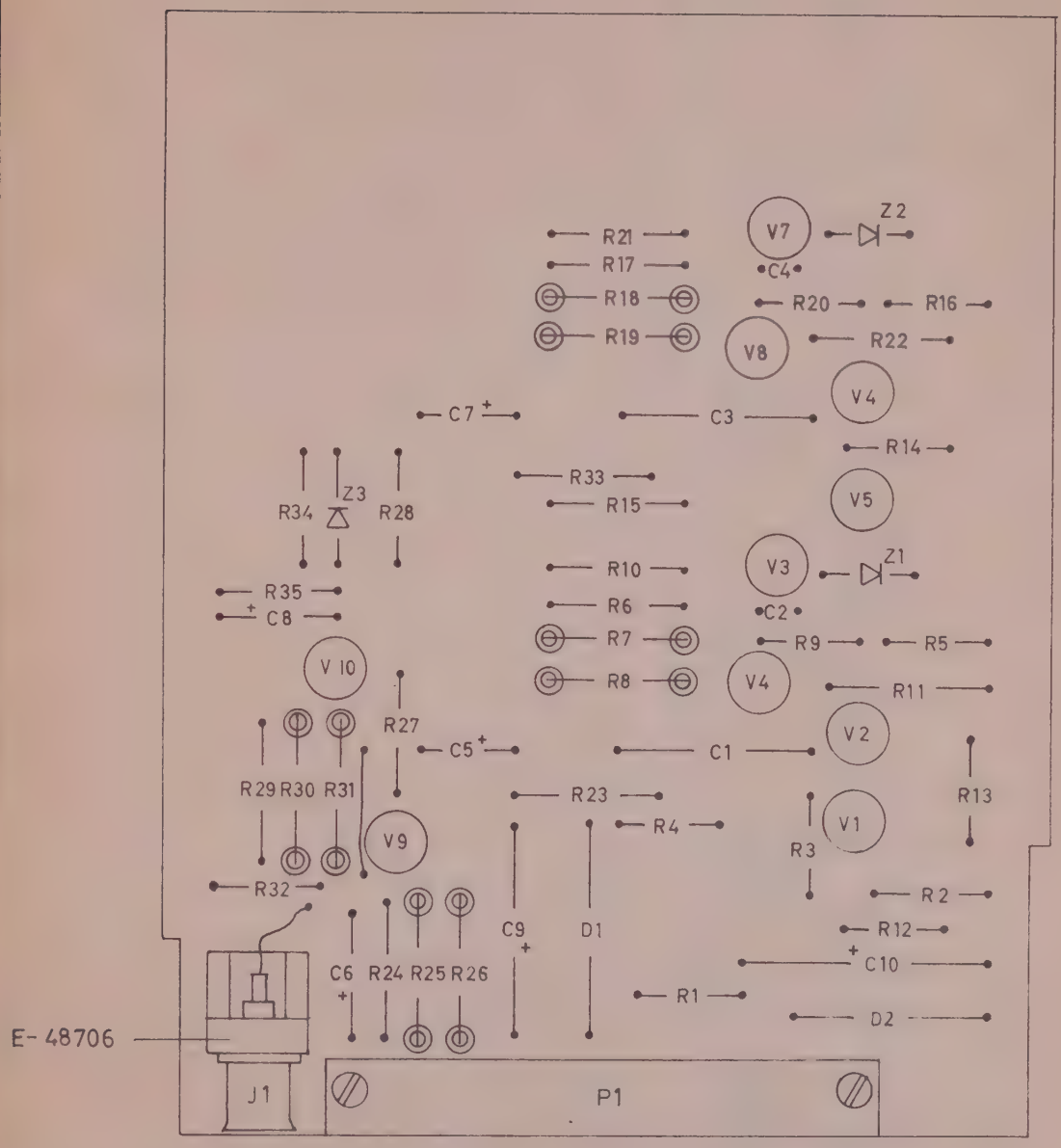
DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



								Måttritning E-48710	
Det.-nr	Ant.	Benämning		Material				Anm.	
Konstr.	Ritad R.Ö.	Kop.	Konstr.	Stand.	Godk.	Skala 1:1		Ersätter	Ersatt av
MAGNETIC AB Stockholm Sweden		VIDEOGENERATOR 487 Videogenerator 1 48701 Komponentnumrering.						Blad	Da. 21.2.65
								Ritn.-nr E-48713	

4118 Wilhelmsons Tr. AB, Sthlm

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.



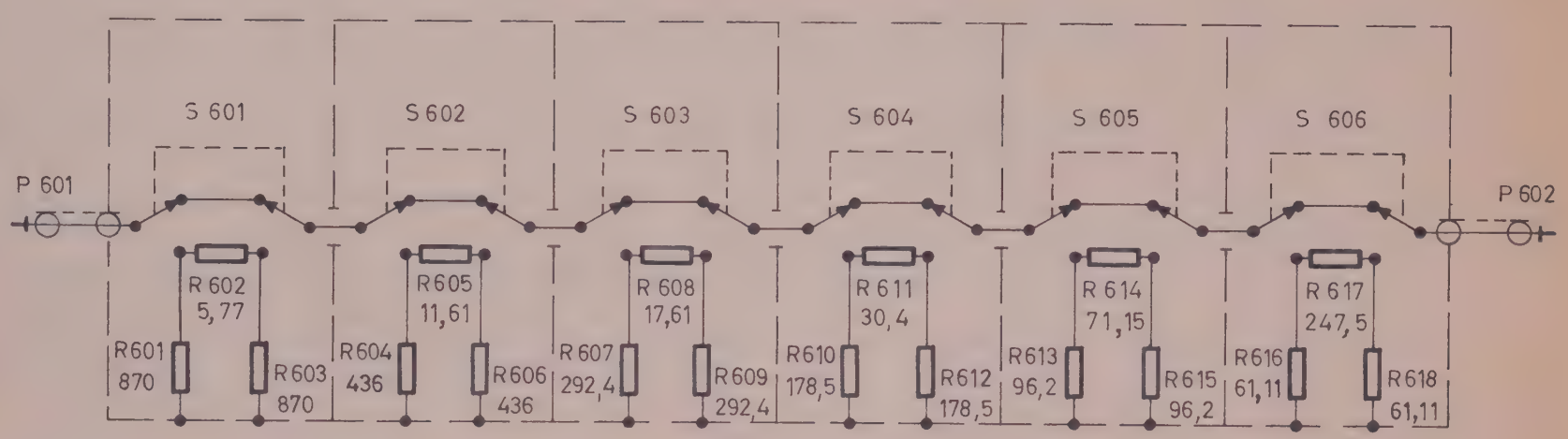
								Måttritning E-48711	
Det.-nr	Ant.	Benämning		Material				Anm.	
Konstr.	Ritad R.Ö.	Kop.	Konstr.	Stand.	Godk.	Skala 1:1		Ersätter	Ersatt av
MAGNETIC AB Stockholm Sweden		VIDEOGENEROR 487 Videogenerator 2. 48702 Komponentplacering.						Blad	Da. 21.2.65
								Ritn.-nr E-48714	

DENNA RITNING FÖRBLIVER VÅR EGENDOM, ATT UTAN VÅRT MEDGIVANDE MÅNGFALDIGA, FÖREVISA, UTLÄMNA ELLER ELJEST OBEHÖRIGEN ANVÄNDA DENSAMMA ÄR FÖRBJUDET OCH BEIVRAS MED STÖD AV LAG AV DEN 30 MAJ 1919 SAMT LAG AV DEN 29 MAJ 1931 § 3.

A 7.12 65

Från ↕ Till

1 dB | 2 dB | 3 dB | 5 dB | 10 dB | 20 dB



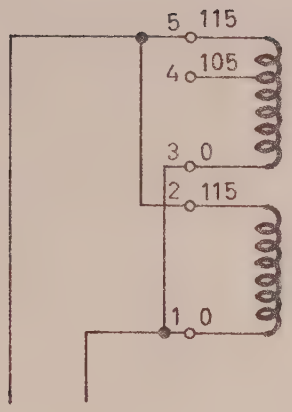
Det.-nr	Ant.	Benämning		Material	Anm.
Konstr.	Ritad B.J.	Kop.	Konstr.	Stand.	Godk.	Skala	Ersätter	Ersatt av
MAGNETIC AB	SPEKTRUMANALYSATOR Typ 211						Blad	Do. 23. 11. 65
Stockholm Sweden	MF - DÄMPARE Principscema							
	SPECTRUM ANALYZER Model 211							
	IF - ATTEN Circuit Diagram							Rtn.-nr E-211011

4118 Wilhelmsons Tr. AB Sthlm

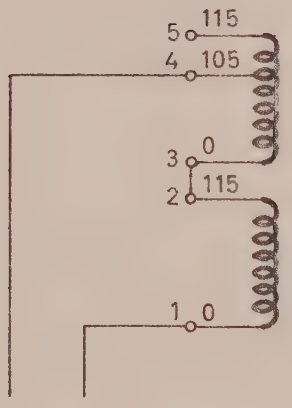
Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R601	Motstånd Resistor	870 ohm	1/4 W	1%	Vitrohm	MEA T2
R602	Motstånd Resistor	5.77 ohm	1/4 W	2%	Metallux	AFL-ORO-F
R603	Motstånd Resistor	870 ohm	1/4 W	1%	Vitrohm	MEA T2
R604	Motstånd Resistor	436 ohm	1/4 W	1%	Vitrohm	MEA T2
R605	Motstånd Resistor	11.61 ohm	1/4 W	2%	Metallux	AFL-ORO-F
R606	Motstånd Resistor	436 ohm	1/4 W	1%	Vitrohm	MEA T2
R607	Motstånd Resistor	292.4 ohm	1/4 W	1%	Vitrohm	MEA T2
R608	Motstånd Resistor	17.61 ohm	1/4 W	2%	Metallux	AFL-ORO-F
R609	Motstånd Resistor	292.4 ohm	1/4 W	1%	Vitrohm	MEA T2
R610	Motstånd Resistor	178.5 ohm	1/4 W	1%	Vitrohm	MEA T2
R611	Motstånd Resistor	30.4 ohm	1/4 W	1%	Vitrohm	MEA T2
R612	Motstånd Resistor	178.5 ohm	1/4 W	1%	Vitrohm	MEA T2

Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
R613	Motstånd Resistor	96.2 ohm	1/4 W	1%	Vitrohm	MEA T2
R614	Motstånd Resistor	71.15 ohm	1/4 W	1%	Vitrohm	MEA T2
R615	Motstånd Resistor	96.2 ohm	1/4 W	1%	Vitrohm	MEA T2
R616	Motstånd Resistor	61.11ohm	1/4 W	1%	Vitrohm	MEA T2
R617	Motstånd Resistor	247.5ohm	1/4 W	1%	Vitrohm	MEA T2
R618	Motstånd Resistor	61.11ohm	1/4 W	1%	Vitrohm	MEA T2
S601	Omkopplare Selector				NSF	8373.K8
S602	Omkopplare Selector				NSF	8373.K8
S603	Omkopplare Selector				NSF	8373.K8
S604	Omkopplare Selector				NSF	8373.K8

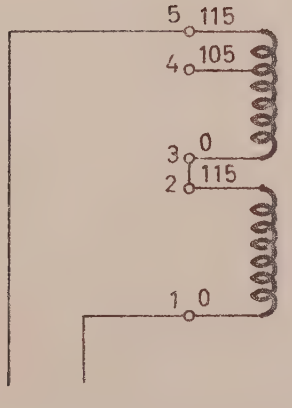
Pos. Nr Pos. No.	Komponentbeskrivning Description	Värde Value	Effekt Arb. sp. Rating	Tolerans Tolerance	Tillverkare Manufacturer	Typ Nr Part No.
S605	Omkopplare Selector				NSF	8373. K8
S606	Omkopplare Selector				NSF	8373. K8
P601	Koaxialkontakt Coaxial connector				Amphenol	UG 88/U
P602	Koaxialkontakt Coaxial connector				Amphenol	UG 88/U



115V



220V



230V

MAGNETIC AB SWEDEN	WIRING DIAGRAM FOR THE POWER-TRANSFORMER PRIMARY-WINDING	20.8.62 E-5691

ORDERING REPLACEMENT PARTS

When ordering replacement parts, please specify the following information to assure your getting the right part in the shortest possible time.

1. A complete description of the part, e.g. resistance, tolerance, wattage, capacitance, voltage, etc.

2. Instrument model number and serial number.

3. Component designation, e.g. C 34, in parts list or circuit diagram.

Should, for some reason, this information be unknown, please describe the component as accurate as possible; its function and location in the equipment.

The component delivered as a replacement part may not be exactly like the one mounted originally in the equipment, as our purchasing department buys from at least two different vendors. The manufacturer of the original component may also have improved his product and thereby changed the dimensions. However, the component will work in the instrument it is intended for.

Guarantee

We guarantee to repair or replace free of charge any of the goods, other than consumable material such as semiconductors valves, lamps and fuses, found to our satisfaction within 12 months after the date of delivery, to be defective owing to faulty workmanship or materials, provided that in the case of goods or component not of our manufacture our liability under this condition is in no circumstances to extend beyond any corresponding liability to us of our supplier.

Any claims must be made within the period of guarantee. We reserve the right to decide what actions shall be taken in case of repair or replacement of parts according to this clause. Under no circumstances shall goods be returned without our consent.

This guarantee does not cover the repair or replacement of any part or parts which fail due to mistakes on the part of operating personnel or of operation of the equipment in a way other than laid down in the operating instructions, or due to fair wear and tear or any other causes not covered by the above guarantee.

RETURN PROCEDURE:

Do not return goods without our written consent. A letter stating the claim should be sent to MAGNETIC AB, Manufacturing Division, Box 110 60 S-161 11, Bromma 11, Sweden. The failure must be clearly specified and model and serial number, of the equipment should be carefully noted.

MP MASTER
MA23605